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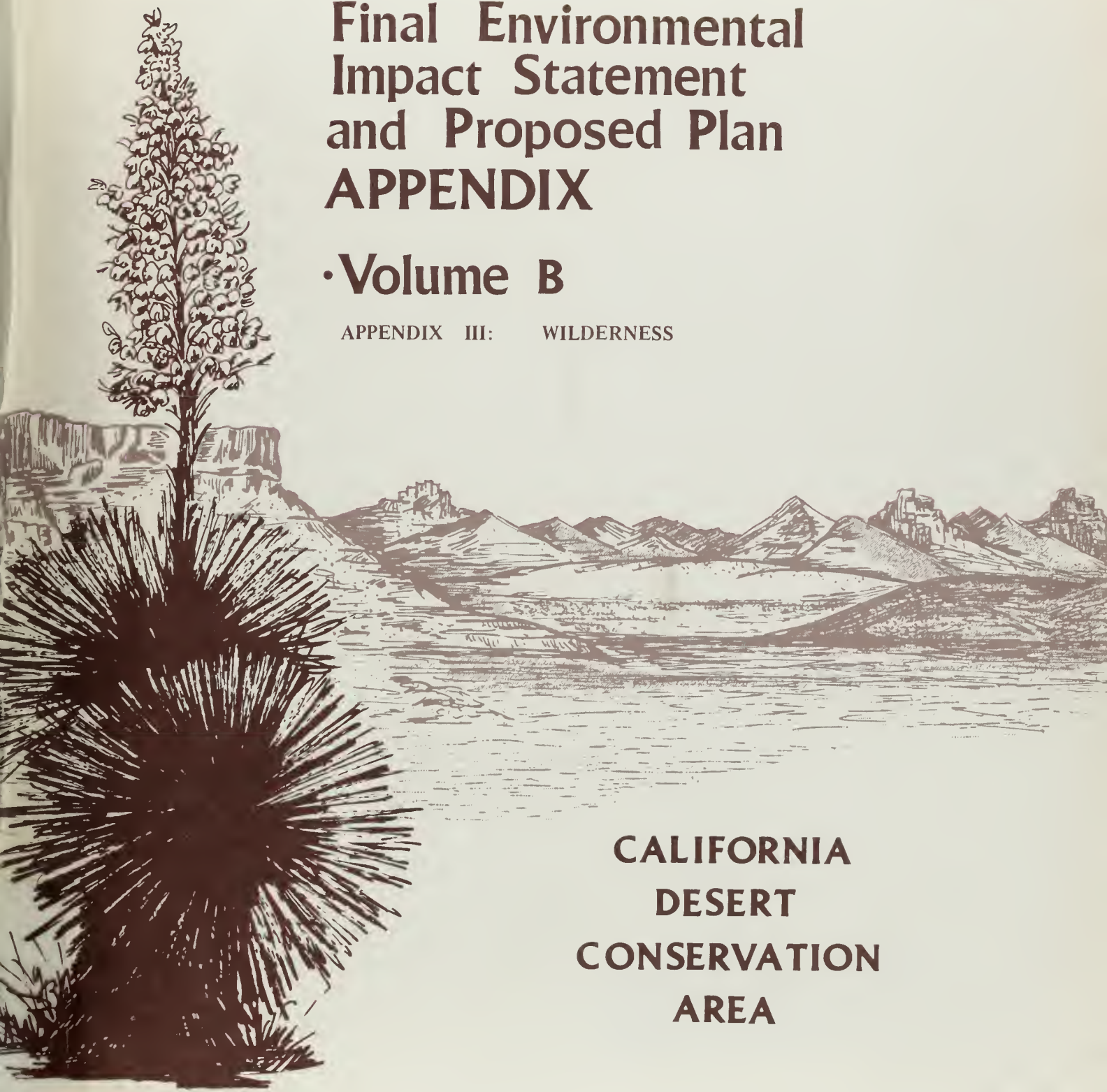
Final Environmental Impact Statement and Proposed Plan APPENDIX

Volume B

APPENDIX III: WILDERNESS



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APPENDIX III

WILDERNESS

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APPENDIX III
WILDERNESS

Part 1

Wilderness Review Program

The Wilderness Act of 1964 established a National Wilderness Preservation System and required that inventories of Federal lands within the National Forests, National Parks, and National Wildlife Refuges be conducted to determine which would qualify for inclusion in the System. Public lands administered by the Bureau of Land Management (BLM) were not included in the original act. It was not until 1976, when the Federal Land Policy and Management Act (PL 94-579) was enacted, that public lands administered by the BLM were required to undergo a similar inventory and evaluation to determine their wilderness potential.

The BLM's Wilderness Review Program applies to all lands administered by the BLM and is divided into three separate phases: inventory, study, and reporting.

Inventory explicitly involves looking at the public lands to locate roadless areas containing 5,000 acres or more of contiguous public lands which meet the criteria listed in Section 2(c) of the Wilderness Act of 1964. Those which meet the criteria are called Wilderness Study Areas (WSAs).

Study determines, through land-use planning, which Wilderness Study Areas will be recommended to the Secretary of the Interior as suitable or nonsuitable for wilderness designation by the Congress. These determinations will consider all relevant values, resources, and land uses.

Reporting consists of actually forwarding, or reporting, the recommendation of suitability or nonsuitability for each Wilderness Study Area through the Secretary of the Interior and the President to the Congress. The recommendations will be accompanied by mineral surveys, environmental assessments, and other data required by law. Within two years after receipt of each Secretarial recommendation, the President must report his final recommendations to Congress. Only Congress may designate an area as part of the National Wilderness Preservation System, and there is no deadline for designation.

The Wilderness Review Program within the California Desert Conservation Area (CDCA) was begun by the BLM in 1978 in response to two Congressional mandates set forth in the Federal Land Policy and Management Act.

1. Section 601 of the Act established the 25-million-acre California Desert Conservation Area (CDCA) and directed the BLM to prepare a comprehensive plan for the management, use, development, and

protection of the CDCA's 12.5 million acres of public lands by September 30, 1980.

2. Section 603 of the same Act directed the inventory and review of all roadless areas within the CDCA which contained 5,000 acres or more of contiguous public lands administered by BLM and which possessed the wilderness characteristics and values identified in Section 2(c) of the Wilderness Act.

As a resource value, wilderness must be inventoried so that it can be compared with other resources in the development of the California Desert Plan. To accomplish this by the legally mandated completion date, the BLM was authorized to conduct the wilderness review of public lands within the CDCA on an accelerated basis.

INVENTORY PHASE

FLPMA mandated the wilderness review of "those roadless areas of five thousand acres or more and roadless islands of the public lands ...having wilderness characteristics described in the Wilderness Act of September 3, 1964." These characteristics which appear in Section 2(c) of the Wilderness Act were the basic criteria used in conducting the Wilderness Inventory of public lands in the California Desert Conservation Area.

In order to determine specific roadless areas containing at least 5,000 acres of contiguous public lands, existing roads conforming to the BLM road definition, developed right of ways, and nonpublic lands were used as area boundaries. Once these roadless area boundaries were determined, the area was inventoried to determine the existence of the three basic Wilderness Act criteria: size, naturalness, and outstanding opportunities for solitude or a primitive and unconfined type of recreation. Those areas determined to meet the three basic wilderness criteria were officially designated as Wilderness Study Areas.

The CDCA Wilderness Inventory was conducted by an interdisciplinary team of BLM resource specialists from June, 1978 to March 31, 1979 when the final report was published. During this period, the team sought public cooperation and involvement and used the resulting comments in their evaluations. The published results included descriptive narratives of each of the roadless areas of public lands within the CDCA, a desert-wide wilderness inventory map, and a list of the 138 roadless areas formally designated as Wilderness Study Areas (WSAs). As a result of formal protests and reevaluation, one WSA was eliminated from further consideration, reducing the number of formally designated WSAs to 137. The inventory files were, and are, available for public review.

The Inventory Phase included an intensive amount of public involvement. During this phase, 57 meetings and workshops were held; these were attended by more than 5,300 people. The wilderness inventory mailing list increased from 3,400 in May, 1978 to 7,000 in October, 1978. A more detailed discussion of the level of public involvement in the CDCA Wilderness

Inventory begins on Page 235 of the final inventory publication, CDCA - Wilderness Inventory - Final Descriptive Narratives, March 31, 1979.

A 30-day protest period followed publication of the final wilderness inventory results. During this time a number of areas were protested by various individuals and organizations. Amendments to the final inventory decisions on five WSAs (145, 159, 184, 184A, 184B) were published and received no further protest. Thirty WSAs have been appealed and are currently before the Interior Board of Land Appeals (IBLA) adjudication. Those areas currently under appeal are identified by an asterisk (*) in Tables III-1-1 and III-1-2.

Congress has stated that, during the period of wilderness review and until Congress determines otherwise, the BLM will manage areas under consideration for wilderness in such a way, and in accordance with existing laws, so as not to impair their suitability for preservation as wilderness. Until Congress acts, all Wilderness Study Areas will be managed in accordance with the "Class WSA" guidelines, which incorporate the Bureau's Interim Management Policy and Guidelines for Lands Under Wilderness Review, published December 12, 1979. Until final adjudication by the Interior Board of Land Appeals (IBLA), 29 of the 30 inventory units currently under appeal also will be subject to wilderness inventory management. One area, WSA 376, was never designated as a Wilderness Study Area.

STUDY PHASE

Following completion of the wilderness inventory, the State Director of the BLM in California officially designated the 138 WSAs within the CDCA. As noted earlier, one WSA was omitted later.

During the Study Phase, the 137 WSAs were evaluated further, utilizing additional criteria, to establish a relative ranking order. The inventory phase investigations were limited to determinations as to whether the various areas did, or did not, meet the minimum criteria (natural condition, solitude, primitive or unconfined recreation opportunities, and size) as specified in Section 2(c) of the Wilderness Act. In order to establish each WSA's relative wilderness potential, it was necessary to expand the criteria and investigate the areas in greater depth. In addition to the "Section 2(c)" criteria, the following factors were also evaluated. These factors were extracted from the Desert Plan Staff Workbook, March 15, 1979.

1. Area to perimeter ratio.
2. Isolation.
3. Habitat types.
4. Plant and animal species.
5. Unique ecological values.
6. Landforms.
7. Rock types.
8. Geologic time periods.
9. Unique geologic, geomorphic, and paleontologic features.
10. Scenic quality index and unique scenic features.

11. Adjacent wilderness.
12. Manageability.
13. Accessibility.
14. Previous recreational use.
15. Historic and cultural values.

Each of the above criteria was assigned a point value and weighted in accordance with its estimated effect on wilderness values. These point values and weightings were based on the professional judgment of members of the Desert Plan Staff who were then focusing on wilderness evaluation. Information used to complete these evaluations was provided by various sources. Wilderness inventory team members familiar with the CDCA provided the information (natural condition, solitude, recreation opportunities, manageability) which it was believed could best be obtained from personnel with extensive field experience. The remaining criteria were evaluated by the staff utilizing information provided either by the other DPS resource specialists or from recreation resource information sources. Following the evaluation of the WSAs, the scores were recorded and totaled. Specific evaluation guidelines and ratings are included as part of the permanent wilderness files which are available for public review at the California Desert District Office in Riverside, California.

This mechanical process provided an initial order which was again evaluated by the recreation staff. Each area was looked at in terms of groupings and specific location, diversity of features within a given area, known current use, etc. The staff recommended two changes in the ranking.

1. Owens Peak (WSA 158)

   This area was raised from 56th to 42nd in ranking. It was felt that the area's excellent scores for habitat diversity, plant and animal diversity, geologic diversity, unique scenery, historic and cultural values, and its known popularity justified raising its position. It was later determined that this WSA had been misplaced in the original sequence, and this was corrected.

2. Woods Mountains (WSA 271)

   This area was raised from 98th to 58th in ranking. This elevation was based on its high scores in scenic quality, solitude, historical-cultural values, and variety of primitive recreation opportunities. This change resulted in the area's being rated above other areas with higher total scores. It was the consensus of the recreation staff that the area had more to offer in terms of the over-all "wilderness experience" than some with higher scores (see Table III-1-1).

Following the establishment of WSA rankings, each Wilderness Study Area underwent a second analysis for multiple-use classification. Competing resource values were identified and evaluated to determine the appropriate multiple-use classification for each area of the CDCA in accordance with over-all objectives for each alternative under the land-use plans. The

factors considered are described in "Development of Plan Alternatives," Section D-3, of the Draft Plan.

The No Action Alternative is a continuation of present management, a legally required alternative. The other three are: the Use Alternative, which focuses on meeting human demands by obtaining the highest degree of consumptive use and production that desert resources could provide, while still meeting legally required environmental standards; the Protection Alternative, which focuses on maximum preservation of natural and cultural values, with emphasis on protecting fragile resource values, allowing use and production only at levels that would not risk diminishing such values; and the Balanced Alternative, which is designed to provide a variety of uses within sustained-yield capabilities, and which represents a trade-off between uses with no constraints other than protection of fragile resources from irreversible decline. Within each of these alternatives are four multiple-use classifications: Class C = Controlled Use (Wilderness and Class C are considered identical for the purposes of the CDCA Plan); Class L = Limited Use; Class M = Moderate Use; and, Class I = Intensive Use.

In order to apply a multiple-use classification to each WSA, the wilderness values which resulted in a quality rating for each WSA were re-analyzed against other resource values within each WSA. For example, when considering wilderness as one of the resources available in a given area, was that resource more valuable to the over-all use of the area than the available mining resource? Than vehicular access? Than the public resource availability to public utilities? Than the agricultural resource of grazing? Of all the resources and uses available in each WSA, which resource produced the "highest and best use," within the meaning of the objectives of the alternative?

It was necessary to assess the wilderness value in comparison with the other resource values. The emphasis given to the different resource values varied according to the over-all objectives of each of the land-use alternatives. For example, high mineral and grazing resource values were given greater consideration than all but the highest wilderness value under the Use Alternative. At the same time, cultural, wildlife, scenic, and wilderness values were more heavily considered than other resources for the Protection Alternative.

Public comment received during the inventory and study phases was considered throughout the evaluation, and many recommendations were incorporated into the Draft Plan. Also, boundary adjustments for manageability and intrusive sights and sounds were considered.

The WSA proposals in the CDCA Draft Plan Alternatives reflect the culmination of the quality rating and multiple-use analysis in determining suitability or nonsuitability for wilderness recommendations. A matrix summarizing these results was published as Table W-1 on Pages 81 and 82 of the CDCA Draft Plan Alternatives and Environmental Impact Statement. The quality rating is shown in Col. 3 of that table and the multiple-use analysis is reflected, by

classification, in cols. 4, 5, and 6 under the various land-use alternative headings.

Following the 90-day public review period, after distribution of the Draft Plan, the next phase of the wilderness evaluation began. Utilizing both site-specific and general information obtained during the review period and additional or updated information obtained from the various resources, the alternatives were re-evaluated. Using the Balanced Alternative as a departure point, changes based on the new information were made. Areas were added and deleted, and in many cases boundary changes were made. Greater emphasis was given to four criteria which it was believed enhanced the "desert-wide wilderness opportunities" available to the public. These were:

1. The physical relationship of the Wilderness Study Area to designated or administratively endorsed State or Federal Wilderness.

2. The area's ranking in terms of its relative wilderness values (see Table III-1-1).

3. The proximity and accessibility of the area to the Los Angeles-San Diego metropolitan areas.

4. Unique landforms and/or diverse terrain which provide a wide spectrum of opportunities that could be experienced by all members of the public.

During this period, each of the 137 Wilderness Study Areas was re-evaluated. The Desert Plan 'Steering Committee,' composed of the Riverside and Bakersfield District Managers and the Director of the Desert Plan Staff, in coordination with the resource specialists, determined whether each Wilderness Study Area would be recommended as suitable or nonsuitable for wilderness designation.

In many cases, suitable recommendations were made only on portions of the WSA. Areas recommended as nonsuitable were assigned other multiple-use class designations, depending upon their resource values. Determinations were made on the basis of whether it was believed that competing resources were of greater or lesser value than the wilderness resource and what would be the "highest and best" use of the land.

This analysis resulted in all or part of 42 Wilderness Study Areas being recommended as suitable for wilderness designation. These Wilderness Study Areas are underlined in Tables III-1-1 and III-1-2.

TABLE III-1-1
WILDERNESS STUDY AREAS LISTED IN ORDER OF WILDERNESS RANKING

RANK*	Name	WSA[1]	RANK	Name	WSA
1.*	Saline Valley[2]	117	25.	Wildrose Canyon	134
2.	Hunter Mountain	123	26.*	Bighorn Mountains	217
3.	Golden Valley	170	27.	Picacho Peak	355A
4.	Santa Rosa Mountains	341	28.	Resting Spring Range	145
5.	In-ko-pah Mountain	368	29.	Fish Creek Mountains	372
6.*	Kingston Range	222	30.	Bristol/Granite Mountains	256
7.	Panamint Dunes	127	31.*	Avawatz Mountains	221
8.	Whipple Mountains	312	32.*	Owens Peak	158
9.*	Providence Mountains	263	33.*	Palen/McCoy	325
10.	Whitewater	218A	34.	Fort Piute	267
11.	Kelso Dunes	250	35.*	Eagle Mountains	334
12.	Little Picacho Peak	356	36.	Darwin Falls	132A
13.	Greenwater Valley	148	37.*	New York Mountains	265
14.	Slate Range	142	38.	Surprise Canyon	136
15.	Turtle Mountains	307	39.*	Funeral Mountains	143
16.*	Owlshead Mountains	156	40.	South Algodones Dunes	362
17.*	Nopah Range	150	41.	Blackwater Well	173
18.	Chemehuevi Mountains	310	42.	Palo Verde Mountains	352
19.	North Algodones Dunes	360	43.*	Clark Mountain	227
20.	Waucoba Wash	120	44.	Newberry Mountains	206
21.	Manly Peak	137	45.*	Old Woman Mountains	299
22.	Inyo Mountains	122	46.	Cinder Cones	239
23.	Coxcomb Mountains	328	47.	Coyote Mountains	373
24.	Little Sand Spring	119	48.	Table Mountain	270

*Indicates WSAs currently under appeal to ILBA.
[1]WSA 184 (Cache Peak) eliminated.
[2]Underlined WSAs are being recommended as suitable for Wilderness designation.

TABLE III-1-1 (Cont'd.)
WILDERNESS STUDY AREAS LISTED IN ORDER OF WILDERNESS RANKING

RANK*	Name	WSA[1]	RANK	Name	WSA
49.	Last Chance Mountain	112	72.	Sylvania Mountains	111
50.	Amboy Crater	304A	73.	Ibex Hills	149
51.	Little Lake Canyon	157	74.	Ibex Spring	149A
52.*	Rodman Mountains	207	75.	Hollow Hills	228
53.	Black Mountain	186	76.	Pinto Basin	334A
54.	South Avawatz Mountains	221A	77.	Cow Heaven	159
55.	Cerro Gordo Peak	124	78.*	Big Maria Mountains	321
56.*	Chuckwalla Mountains	348	79.	North Argus Range	132B
57.	Pinto Mountains	335	80.	Great Falls Basin	132
58.*	Woods Mountains	271	81.	South Coxcomb Mountains	328A
59.	Orocopia Mountains	344	82.	Cleghorn Lakes	304
60.*	Mecca Hills	343	83.	Mesquite Mountains	225
61.	Piper Mountain	115	84.	Skinner Peak	160C
62.	El Paso Mountains	164	85.	South Providence Mountains	262
63.*	Sheephole/Cadiz	305	86.	Greenwater Range	147
64.	Sacramento Mountains	292	87.	Lava Hills	258
65.	Indian Pass	355	88.*	Middle Park Canyon	137A
66.	Morongo	218	89.	Kelso Mountains	249
67.*	Soda Mountains	242	90.	Rice Valley	322
68.	Bigelow Cholla Garden	290	91.	Old Dad Mountain	243
69.*	Castle Peaks	266	92.*	Cady Mountains	251
70.	Stepladder Mountains	294	93.*	Mid Hills	264
71.	Cima Dome	238B	94.	Clipper Mountains	260

TABLE III-1-1 (Cont'd.)
WILDERNESS STUDY AREAS LISTED IN ORDER OF WILDERNESS RANKING

RANK*	Name	WSA[1]	RANK	Name	WSA
95.	Little Chuckwalla Mountains	350	117.	South Bristol Mountains	258A
96.	Saline Dunes	121	118.	Kelso Peak	160B
97*	Red Mountain	172	119.	Deer Spring	237A
98.	Eight-Mile Tank	245	120.	Antelope Spring	107A
99.	Frog Creek	163	121.*	Coso Range	131
100.	Horse Canyon	160	122.	Lower Saline Valley	117A
101.	Pahrump Valley	154	123.	Silurian Valley	222A
102.	Piute Mountains	288	124.	Valley View	237B
103.	Signal Hill	272	125.	North Mesquite Mountains	223
104.	Rainbow Wells	244	126.	North Tip	100A
105.	Grass Valley	173A	127.	McAfee Creek	100
106.	Pilot Peak	295	128.	South Nopah Range	150A
107.	Teutonia Peak	238A	129.	Wyman Creek	105
108.	Stateline	225A	130.	Sleeping Beauty Mountain	252
109.	Magee/Atkins	237	131.	Saddle Peak Mountains	219
110.	South Saddle Peak Mountains	220	132.	Toler Creek	101
111.	Dead Mountains	276	133.*	Mesquite Spring	251A
112.	Shadow Valley	235A	134.*	North Coso Range	130
113.	Ship Mountains	300	135.	Marble Mountains	259
114.	Essex	288A	136.	White Mountain	103
115.	Cottonwood Creek	104	137.	North Death Valley	118
116.	NW Fishlake Valley	102			

TABLE III-1-2
WILDERNESS STUDY AREAS LISTED IN ORDER BY WSA NUMBER

WSA*	Name	Rank	WSA	Name	Rank
			131*	Coso Range	121
100	McAfee Creek	127	132	Great Falls Basin	80
100A	North Tip	126	132A	Darwin Falls	36
101	Toler Creek	132	132B	North Argus Range	79
102	NW Fishlake Valley	116	134	Wildrose Canyon	25
103	White Mountain	136	136	Surprise Canyon	38
104	Cottonwood Creek	115	137	Manly Peak	21
105	Wyman Creek	129	137A*	Middle Park Canyon	88
107A	Antelope Spring	120	142	Slate Range	14
111	Sylvania Mountains	72	143*	Funeral Mountains	39
112	Last Chance Mountain	49	145	Resting Spring Range	28
115	Piper Mountain	61	147	Greenwater Range	86
117*	Saline Valley[1]	1	148	Greenwater Valley	13
117A	Lower Saline Valley	122	149	Ibex Hills	73
118	North Death Valley	137	149A	Ibex Spring	74
119	Little Sand Spring	24	150*	Nopah Range	17
120	Waucoba Wash	20	150A	South Nopah Range	128
121	Saline Dunes	96	154	Pahrump Valley	101
122	Inyo Mountains	22	156*	Owlshead Mountains	16
123	Hunter Mountain	2	157	Little Lake Canyon	51
124	Cerro Gordo Peak	55	158*	Owens Peak	32
127	Panamint Dunes	7	159	Cow Heaven	77
130*	North Coso Range	134	160	Horse Canyon	100

*Indicates WSAs currently under appeal to IBLA.
[1]Underlined WSAs are being recommended for Wilderness designation

TABLE III-1-2 (Cont'd.)
WILDERNESS STUDY AREAS LISTED IN ORDER BY WSA NUMBER

WSA*	Name	Rank	WSA	Name	Rank
160B	Kelso Peak	118	228	Hollow Hills	75
160C	Skinner Peak	84	235A	Shadow Valley	112
163	Frog Creek	99	237	Magee/Atkins	109
164	El Paso Mountains	62	237A	Deer Spring	119
170	Golden Valley	3	237B	Valley View	124
172*	Red Mountain	97	238A	Teutonia Peak	107
173	Blackwater Well	41	238B	Cima Dome	71
173A	Grass Valley	105	239	Cinder Cones	46
186	Black Mountain	53	242*	Soda Mountains	67
206	Newberry Mountains	44	243	Old Dad Mountain	91
207*	Rodman Mountains	52	244	Rainbow Wells	104
217*	Bighorn Mountains	26	245	Eight-Mile Tank	98
218	Morongo	66	249	Kelso Mountains	89
218A	Whitewater	10	250	Kelso Dunes	11
219	Saddle Peak Mountains	131	251*	Cady Mountains	92
220	South Saddle Peak Mountains	110	251A*	Mesquite Spring	133
221*	Avawatz Mountains	31	252	Sleeping Beauty Mountain	130
221A	South Avawatz Mountains	54	256	Bristol/Granite Mountains	30
222*	Kingston Range	6	258	Lava Hills	87
222A	Silurian Valley	123	258A	South Bristol Mountains	117
223	North Mesquite Mountains	125	259	Marble Mountains	135
225	Mesquite Mountains	83	260	Clipper Mountains	94
225A	Stateline	108	262	South Providence Mountains	85
227*	Clark Mountain	43	263*	Providence Mountains	9
			264*	Mid Hills	93

TABLE III-1-2 (Cont'd.)
WILDERNESS STUDY AREAS LISTED IN ORDER BY WSA NUMBER

WSA*	Name	Rank	WSA	Name	Rank
265*	New York Mountains	37	322	Rice Valley	90
266*	Castle Peaks	69	325*	Palen/McCoy	33
267	Fort Piute	34	328	Coxcomb Mountains	23
270	Table Mountain	48	328A	South Coxcomb Mountains	81
271*	Woods Mountains	58	334*	Eagle Mountains	35
272	Signal Hill	103	334A	Pinto Basin	76
276	Dead Mountains	111	335	Pinto Mountains	57
288	Piute Mountains	102	341	Santa Rosa Mountains	4
288A	Essex	114	343*	Mecca Hills	60
290	Bigelow Cholla Garden	68	344	Orocopia Mountains	59
292	Sacramento Mountains	64	348*	Chuckwalla Mountains	56
294	Stepladder Mountains	70	350	Little Chuckwalla Mountains	95
295	Pilot Peak	106	352	Palo Verde Mountains	42
299*	Old Woman Mountains	45	355	Indian Pass	65
300	Ship Mountains	113	355A	Picacho Peak	27
304	Cleghorn Lakes	82	356	Little Picacho Peak	12
304A	Amboy Crater	50	360	North Algodones Dunes	19
305*	Sheephole/Cadiz	63	362	South Algodones Dunes	40
307	Turtle Mountains	15	368	In-Ko-Pah Mountain	5
310	Chemehuevi Mountains	18	372	Fish Creek Mountains	29
312	Whipple Mountains	8	373	Coyote Mountains	47
321*	Big Maria Mountains	78			

Part 2

Analysis of Individual Wilderness Study Areas (WSAs)

WILDERNESS STUDY AREA 100

McAfee Creek

GENERAL DESCRIPTION

This area,[1] which contains 456 acres, is bounded on the north and east by the California/Nevada state boundary; on the south by a well-maintained access road to a stream diversion canal from McAfee Creek; and on the west by the Inyo National Forest RARE II[2] area. All of the land is public.

The terrain ranges from flat to rolling on the east to rough and mountainous on the west. The elevation varies from 4,972 feet on the eastern edge to 5,250 feet in the northwest. This WSA is wholly alluvial fan.

WILDERNESS QUALITY

Description of Environment

This relatively flat area is primarily a desert sagebrush community, with vegetation of light shades of green and brown.

Natural Condition

This roadless area appears to have been affected primarily by natural forces, with man's imprint substantially unnoticeable. The existing stream diversion and access road from McAfee Creek along the southern boundary are not obvious because of the screening of sagebrush and riparian vegetation. The area appears to be used primarily for cattle grazing, which does not substantially affect natural conditions.

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[1]Portions of Section 35, T. 3 S. R. 35 E., and Section 2, T. 4 S, R. 35 E., Mount Diablo Meridian (MDM).
[2]RARE II - Roadless Area Review and Evaluation, established by the U. S. Forest Service.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

This area contains outstanding opportunities for solitude because of its relatively primitive character. Also, there is an adjacent large roadless RARE II area to the west and extensive topographical and vegetational variations which screen users from one another. The large size of the combined areas, varied topography and vegetation, the mountainous nature of the adjacent RARE II area, and lack of man-made features provide for movement and diverse outstanding opportunities for an unconfined and primitive type of recreation.

WILDERNESS STUDY AREA RANKING

This WSA was ranked 127 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Potential exists in this WSA for uranium and thorium deposits. A reported occurrence of uranium mineralization in the Quarternary alluvium suggests a good potential for future exploration and possible development of this mineral. Potentially favorable geologic environments exist throughout the area for salable mineral commodities (sand and gravel and crushed rock) and, in the upland areas, for metallic mineral deposits (especially base and precious metals).

Vegetation

No unusual plant assemblages occur within this WSA. The typical components of the vegetation include: Artemisia tridentata, Atriplex confertifolia, Eurotica lanata, Grayia spinosa, Pinus monophylla, and Juniperus osteosperma. Dominant plant communities include shadscale, sagebrush scrub, and Utah juniper-one leaf pinyon woodland.

Wildlife

No officially listed species are known to occur within the area. The most significant known species is the pale kangaroo mouse (Microdipodops pallidus); this WSA encompasses less than 1 percent of this species' range in the California Desert Conservation Area (CDCA).

Cultural Resources

One area of high cultural resources sensitivity occurs within the WSA.

Native American Uses, Needs, and Sites

The Inyo National Forest and adjacent proposed WSAs have been traditionally employed by the Paiute and a few Panamint Shoshone. Most use continues to be

associated with Owens Valley and Moor Lake Paiute. The profile of areas includes seasonally occupied permanent summer camps, late summer pinyon collection camps, and associated areas of cultural sensitivity. Areas of religious and ceremonial significance include pinyon collection sites, rock art sites, natural features, watering sites, some temporary but currently occupied camping regions, and many material resource sites.

Scenic Quality

Over-all scenic quality is "low", although the rating was somewhat enhanced by the scenic White Mountains backdrop. The number and impact of intrusions in this area are minimal.

General Recreation

There are no known recreational resources in this WSA.

Range Uses and Potential

Thirty percent of the Fishlake Valley Allotment is in this WSA. This allotment is grandfathered. There are unmanaged herds of horses and burros.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Specific comments were directed toward the natural integrity of the area and its contiguity to a RARE II area.

Study Phase

Sixteen letters were received for WSA 100. Ten were in favor of wilderness designation, four were against, and two were conditional. Two of those against dealt with inventory concerns of 2(c) criteria, such as roads and other structures and other human activities. The other two dealt with comments on specific-use interests. One commenter felt the definition of "road" was incorrect and that four-wheel drive vehicles should not be excluded from wilderness. The other felt mining would be the best use of the land and should pre-empt wilderness. He felt that the wilderness study was rushed and thus included roaded areas and areas smaller than the 5,000-acre minimum required in the 2(c) criteria.

Most letters in favor of wilderness designation mentioned the Section 2(c) criteria as well as other considerations for designating the area as wilderness. A major factor is its contiguity to RARE II lands. Many commenters felt BLM wilderness would "buffer" the RARE II lands and protect and enhance the management of both the RARE II and BLM wilderness lands. Commenters felt wilderness designation would protect wildlife, specifically the Cottonwood Creek Paiute trout and the black toad, found at Antelope Springs. It was felt that designation would enhance recreation, such as hiking, camping, and backpacking, and would protect other qualities, such as

air quality, historic mining values, geologic interpretation, and nature study.

It was also recommended that wilderness designation be coordinated with Nevada for those areas on the two states' common border and that WSAs 100 through 107 be combined into one study area.

One comment recommending wilderness status was received in response to the Public Input Guidelines for the Wilderness Study Phase ("Workbook") (March 15, 1979).

Draft Plan Alternatives

One reviewer recommended that wilderness area boundaries in general be extended in the Protection Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The McAfee Wilderness Study Area (100) is recommended as nonsuitable for wilderness designation. The low wilderness rating, competing mineral potential, and the Fishlake Valley grazing allotment, which is grandfathered, were factors. The lack of qualities identified in the desert-wide wilderness objectives was also a consideration in the decision.

The area was recommended for Class L designation. This designation would restrict use while protecting the known natural values.

IMPACT OF PROPOSED PLAN

The area is recommended for Class L. Within this small area (407 acres), mineral exploration and development could degrade the wilderness values; however, mitigation is required. Motorized activities on designated ways would reduce solitude and opportunties for primitive types of recreation. Naturalness may also be affected.

WILDERNESS STUDY AREA 100A

North Tip

GENERAL DESCRIPTION

Area[1] boundaries are defined to the north and east by the California/Nevada border and to the south and west by the Inyo National Forest RARE II area. The entire area (407 acres) is public land. The terrain is rolling to steep, sloping to the east. The elevation varies from 5,292 feet along the California/Nevada boundary to 6,296 feet near the southwest corner of the study area. This WSA is wholly alluvial fan.

WILDERNESS QUALITY

Description of Environment

The area consists of the very steep lower slopes of Juniper Mountain. Perry Aiken Creek splits the small roadless area. One peak within the area reaches an elevation of 6,296 feet and supports a few pinyon trees.

Natural Condition

No structures or marks of man are apparent in the area.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The area contains outstanding opportunities for solitude and primitive and unconfined types of recreation because of the relatively steep topography, primitive character of the landscape, and adjacent RARE II area.

WILDERNESS STUDY AREA RANKING

This WSA rated 126 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Potential exists in this WSA for uranium and thoruim deposits. A reported occurrence of uranium mineralization in the Quaternary alluvium suggests a good potential for future exploration and possible development of this mineral. Potentially favorable geologic environments exist throughout this area for salable mineral commodities (sand and gravel and crushed rock) and,

[1]Portion of SW Section 27, T. 3 S., R. 35 E., MDM.

in the upland areas; for metallic mineral deposits (especialy base and precious metals).

Vegetation

No unusual plant assemblages are found within this WSA. The typical components of the vegetation include: Artemisia tridentata, Atriplex confertifolia, Eurotica lanata, Grayia spinosa, Pinus monophylla, and Juniperus osteosperma. The dominant plant communities include shadscale, sagebrush scrub, and Utah juniper-one leaf pinyon woodland.

Perry Aiken Creek drains east near the southern portion of the study area. Vegetation is mixed, exhibiting strong Great Basin desert influences near the lower mountain slopes and valley floor. A stand of pinyon pines is located along the southern boundary.

Wildlife

The most significant species located within this area, the pale kangaroo mouse, occurs along the valley floor and lower mountain slopes. Less than 1 percent of this species' range in the CDCA occurs in WSA 100A.

Cultural Resources

The WSA lies within an area of high cultural resource sensitivity.

Native American Uses, Needs, and Sites

The full extent of the Inyo National Forest and adjacent WSAs has been traditionally employed by the Paiute and a few Panamint Shoshone. Most use continues to be associated with Owens Valley and Moor Lake Paiute. The profile of areas includes seasonally occupied permanent summer camps, late summer pinyon collection camps, and associated areas of cultural sensitivity. Areas of religious and ceremonial significance include pinyon collection sites, rock art sites, natural features, water sites, some temporary but currently occupied camping regions, and many material resource sites.

Scenic Quality

Over-all scenic quality is "low." Scores for all categories were low, although the influence of the adjacent White Mountain scenic backdrop slightly enhanced the rating. The number and impact of intrusions in this area are minimal.

General Recreation

There are no known recreation resources in this WSA.

Range Use and Potential

Thirty percent of the Fishlake Valley Allotment is in this WSA. This allotment is grandfathered. There are unmanaged herds of horses and burros.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

The majority of comments received agreed with the findings.

Study Phase

Sixteen letters were received for WSA 100A. Ten were in favor of wilderness designation, four were against, and two were conditional. Two of those against dealt with inventory concerns of 2(c) criteria, such as roads and other structures and other human activities. The other two dealt with comments on specific interests. One commenter felt the definition of "road" was incorrect and that four-wheel drive vehicles should not be excluded from wilderness. The other felt mining would be the best use of the land and should pre-empt wilderness. He felt that the wilderness study was rushed and thus included roaded areas and areas smaller than the 5,000-acre minimum required in the 2(c) criteria.

Most letters in favor of wilderness designation mentioned the 2(c) criteria as well as other considerations for designating the area as wilderness. A major factor is its contiguity to RARE II lands. Many commenters felt BLM wilderness would "buffer" the RARE II lands and protect and enhance the management of both the RARE II and BLM wilderness lands. Commenters felt wilderness designation would protect wildlife, specifically the Cottonwood Creek Paiute trout and the black toad, found at Antelope Springs. It was felt that designation would enhance recreation such as hiking, camping, and backpacking, and would protect other qualities, such as air quality, historic mining values, geologic interpretation, and nature study.

It was also recommended that wilderness designation be coordinated with Nevada for those areas on the two states' common border and that WSAs 100 through 107 be combined into one study area.

One workbook comment was received recommending wilderness status.

Draft Plan Alternatives

One comment specific to WSA 100A was received. It was a request for a general expansion of areas recommended for wilderness in the "Preferred Alternative."

SUMMARY OF RATIONALE FOR PROPOSED PLAN

Wilderness Study Area 100A, North Tip, is recommended as nonsuitable for wilderness designation. The low wilderness ranking is reflected in this

decision. Mineral exploration and development, a grandfathered grazing allotment, and recreational motorized vehicle use are considered to be more significant than the wilderness values. The area did not meet the criteria outlined for desert-wide wilderness objectives.

The entire WSA was recommended for Class L designation to ensure that consumptive uses would be limited to protect the area's natural and cultural value.

IMPACT OF PROPOSED PLAN

Under Class C designation, mineral exploration and development could degrade the wilderness values, however mitigation is required. Motorized activities on designated ways could degrade both solitude and opportunities for primitive types of recreation. Grazing has been conducted in the past without serious effects and if continued at the same level would not result in a significant loss of quality.

WILDERNESS STUDY AREA 101

Toler Creek

GENERAL DESCRIPTION

This area[1] (897 acres) is bounded on the north by an access road to the stream diversion from McAfee Creek; on the east and south by the California/Nevada border and access road to Toler Creek; and on the west by the Inyo National Forest RARE II area. This area is all public lands.

The terrain is flat to rolling along the eastern half, gently sloping to the east, whereas the western half is rougher and mountainous. The elevation varies from 4,960 feet in the east to a high of 6,400 feet near the west-central edge of the study area. This WSA consists of 75 percent alluvial fans and 25 percent mountains.

WILDERNESS QUALITY

Description of Environment

This low rolling area is primarily a sagebrush community sloping upward moderately from east to west to the foothills of the White Mountains, a RARE II area of the Inyo National Forest. The area is transversed east to west by two washes from the Red Mountain area.

Natural Conditions

The area appears to have been affected primarily by natural forces with the imprint of man substantially unnoticeable. The way bordering the eastern boundary and the way transversing the foothills in the western portion are not maintained and are substantially unnoticeable because of screening by sagebrush and the low rolling character of the terrain. The area is used primarily for cattle grazing, which does not substantially affect the natural conditions.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

This area contains outstanding opportunities for solitude because of its relatively primitive character, the adjacent RARE II area, extensive topographical and vegetational variations, which serve to screen users from one another. For the same reasons, there are many outstanding opportunities for a primitive and unconfined type of recreation. Lack of man-made features also permits unconfined movement.

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[1]Portions of Sections 1, 2, 10, and 11, T. 4 S., R. 35 E., MDM.

WILDERNESS STUDY AREA RANKING

This WSA was ranked 132 out of 137.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Potential exists in this WSA for uranium and thorium deposits. A reported occurrence of uranium mineralization in the Quarternary alluvium suggests a good potential for future exploration and possible development of this mineral. Potentially favorable geologic environments exist throughout this area for salable mineral commodities (sand and gravel and crushed rock) and, in the upland areas, for metallic mineral deposits (especially base and precious metals).

Vegetation

No unusual plant assemblages occur within this WSA. The habitat type is Great Basin sagebrush desert. The typical components of the vegetation include: Artemisia tridentata, Atriplex confertifola, Eurotica lanata, Grayia spinosa, Pinus monophylla, and Juniperus osteosperma. The dominant plant communities include shadscale, sagebrush scrub, and Utah juniper-one leaf pinyon woodland.

Wildlife

No officially listed species are known to occur within the area. The most significant known species in the area is the pale kangaroo mouse; this area includes less than 1 percent of this species' range in the CDCA.

Cultural Resources

One area of high cultural resource sensitivity is located within the area.

Native American Uses, Needs, and Sites

The full extent of the Inyo National Forest and adjacent proposed WSAs has been traditionally employed by the Paiute and a few Panamint Shoshone. Most use continues to be associated with Owens Valley and Mono Lake Paiute. The profile of areas includes seasonally occupied permanent summer camps, late summer pinyon collection camps, and associated areas of cultural sensitivity. Areas of religious and ceremonial significance include pinyon collection sites, rock art sites, natural features, watering sites, some temporary but currently occupied camping regions, and many material resource sites.

Scenic Quality

Over-all scenic quality is "low." It was rated low in all categories, although its score was somewhat enhanced by the scenic White Mountain backdrop. The number and impact of intrusions in this area are minimal.

General Recreation

There are no known recreation resources in this WSA.

Range Uses and Potential

Half of this WSA includes about 30 percent of the Fishlake Valley Allotment. The other half includes about 5 percent of the Bar 99 Allotment. Both allotments are grandfathered. There are unmanaged herds of wild horses and burros in this area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Specific comments supported the findings.

Study Phase

The majority of letters received about WSA 101 dealt with the study phase. About twice as many of these comments were in favor of wilderness designation for this WSA as were opposed. Many mentioned the area's contiguity to RARE II lands as a worthy reason for wilderness designation. Others mentioned the need to protect wildlife, specifically the black toad and the Cottonwood Creek Paiute trout. Other concerns were preserving air quality of the area and preserving geologic, scenic, and other qualities that make the area a fine hiking site.

The study phase comments that opposed designation of WSA 101 for wilderness were concerned with access--allowing access for hunting and fishing--and allowing certain resource activities, such as livestock grazing and mineral exploration and development. Fear was expressed that the inventory study was too rushed and underfunded, therefore roaded areas and areas of less than 5,000 acres had been mistakenly included.

One letter, in response to the workbook, was received, favoring wilderness designation.

Draft Plan Alternatives

A comment specific to WSA 101 was received in response to the Draft Desert Plan Alternatives. A general expansion of the area recommended for wilderness designation in the "Preferred Alternative" was requested.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 101, Toler Creek, is recommended as nonsuitable for wilderness designation.

Its relatively low ranking, 132 out of 137 WSAs, was a factor in this decision. Two grandfathered grazing allotments and the area's potential for

mineral development (uranium) were also considerations. The site was not considered to possess any of the qualities outlined as part of the desert-wide wilderness objectives.

The area is recommended for Class L to protect the wildlife resources and the known area of high cultural sensitivity.

IMPACT OF PROPOSED PLAN

The area is recommended for Class L. The area is small enough, 897 acres, that most activities, regardless of their scope, could adversely impact the entire area. Mineral exploration and development would degrade the naturalness and reduce opportunities for primitive and unrestricted types of recreation; however, extensive mitigation is required in Class L and in Wilderness Study Areas. Grazing is currently allowed within the boundaries of the WSA. Since existing levels of use have not reduced wilderness values, if continued at this level further adverse impacts are not expected. Motorized vehicle activity on designated ways would reduce the wilderness values for both this area and the adjoining USFS potential wilderness area.

WILDERNESS STUDY AREA 102

NW Fishlake Valley

GENERAL DESCRIPTION

This large area[1] (12,585 acres), situated on the eastern slope of the White Mountains and bordering Fishlake Valley, is bounded on the north by the Toler Creek access road; on the east by the California/Nevada border, Furnace Creek access road, and State Route 3A; on the south by the Indian Garden Creek Road; and on the west by the Inyo National Forest RARE II area. All land in this area is public.

The terrain is flat to rolling along the northeastern edge of the area with the slope gently to the northeast; the western portion is quite rough and mountainous. The elevation varies from 4,960 feet along the northeast boundary to 6,859 feet near the southwest portion. This WSA consists of 40 percent dissected alluvial fans, 35 percent mountains, and 25 percent alluvial fans.

WILDERNESS QUALITY

Description of Environment

This large, rolling area bordering the Inyo National Forest is a moderate east-facing slope overlooking Fishlake Valley. It is transversed east to west by many washes. The vegetative cover appears to be primarily a uniform sagebrush-type community, with desert riparian vegetation in the washes.

Natural Condition

The area appears to have been affected primarily by natural forces, with man's imprint substantially unnoticeable. The improvements that do exist, such as the way bordering the northern boundary and the jeep trail along Furnace Creek, are not maintained and are substantially unnoticeable because of variation in terrain and vegetative screening. An access road to a functional windmill off State Route 3A in the southeastern portion of the area has been excluded from the WSA because the road has been maintained and the windmill is actively used by local ranching operations.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

This area contains outstanding opportunities for solitude because of its relatively primitive character and extensive topographical and vegetational

[1]Portions of T. 4 S., Rs. 35 and 36 E., and T. 5 S., Rs. 36 and 37 E., MDM.

variations which screen users from one another. For these reasons, and because of the lack of man-made features, there are many outstanding opportunities for solitude and a primitive type of recreation.

WILDERNESS STUDY AREA RANKING

This WSA was ranked 116 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Most of the upland portion of the WSA has a favorable geologic environment for the discovery of metallic mineral resources. Underlain by multiple intrusions of Jurassic monzonites, the area also has anomalous rare-earth, tin, lithium and base and precious metal geochemical values. The multiple intrusions environment is the most common geologic situation for disseminated and porphyry copper or molybdenum deposits in the western United States. The existence of the anomalous geochemical values suggests the possibility of mineralization in the area. Also, a newly discovered major deposit of molybdenum is locatd in similar rocks only a few miles to the southeast in the Sylvania Mountains.

The upland area also has geologic terrane considered potentially favorable to discovery of uranium or thorium deposits. The southern portion of this WSA is under claim (possibly for uranium or gold), and anomalous gamma-ray values were obtained by an airborne survey.

The southeastern quarter of this WSA has favorable geology for desposits of sand and gravel.

Vegetation

The valley floor is dominated by Great Basin desert vegetation such as shadscale (Atriplex confertifolia), greasewood (Sarcobatus vermicalatus), and sagebrush (Artemisia spp). Numerous washes running west to east are located here.

Wildlife

The pale kangaroo mouse is the only identified significant wildlife species. It occurs on approximately 16 square miles, which is 5 percent of its CDCA range. As there has not been an intensive wildlife survey, other important resources might be expected to occur.

Cultural Resources

No known areas of cultural resource sensitivity have been located within this area, as no portion of the area has been systematically surveyed.

Native American Uses, Needs, and Sites

The Inyo National Forest and adjacent proposed WSAs have traditionally been used by the Paiute and some Panamint Shoshone. At present, the area is utilized by the Owens Valley and Mono Lake Paiute. The areas used include seasonally occupied, permanent summer camps and late summer pinyon collection areas. Sites which are religiously and ceremonially important include pinyon collection areas, mortuary sites, and many other cultural and material resources, such as rock art sites, occupation sites and seasonally occupied camping regions.

Scenic Quality

Overall, the scenic quality is "low." It was rated low in all categories, although its score was somewhat enhanced by the scenic White Mountain backdrop. The number and impact of intrusions in this area are minimal.

General Recreation

There are no known recreation resources in this WSA.

Range Uses and Potential

Ninety percent of the Bar 99 Allotment and 5 percent of the Oasis Ranch Allotment fall in this WSA. Both allotments are grandfathered. This area includes a wild horse and burro range.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Specific comments supported the findings.

Study Phase

Most letters received about WSA 102 dealt with the study phase. About three times as many of these study phase comments favored wilderness designation as opposed. Many mentioned the area's contiguity to RARE II lands as making it worthy for wilderness designation. Others mentioned the need to protect wildlife, specifically the black toad of Antelope Springs and the Cottonwood Creek Paiute trout. Other concerns were preservation of flora and air and scenic quality of the area and its historic mining value. These qualities were seen to make the area an especially good site for hiking, camping, and backpacking and for geologic and nature study.

The comments opposed to wilderness designation of WSA 102 indicated a fear that hunting and fishing would be precluded from the area. The commenters mentioned sights and sounds outside the WSA which would affect the area's solitude.

The letters received concerning the WSA, in response to the workbook, were in favor of wilderness designation because of the area's easy accessibility and its relationship to U.S. Forest Service lands.

Draft Plan Alternatives

A comment specific to WSA 102 in response to the Draft Desert Plan Alternatives requested a general expansion of the area recommended for wilderness designation in the "Preferred Alternative."

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 102, NW Fishlake Valley, is recommended as nonsuitable for wilderness designation. The area did not possess the qualities identified as part of the desert-wide wilderness objectives. The low relative wilderness quality rating and competing mineral potential plus two grandfathered grazing allotments (Bar 99 and Oasis Ranch) were factors in this decision.

The WSA was recommended for Class L designation, which would limit use and protect existing natural values.

IMPACT OF PROPOSED PLAN

The WSA is recommended for Class L. Mineral development may be allowed in this class and would degrade naturalness and reduce opportunities for primitive and unconfined types of recreation; however, extensive mitigation is required. If maintained at the present level adverse impacts from grazing should not further impair wilderness values.

Motorized vehicle activity on designated routes within the WSA would reduce opportunites for solitude and primitive recreation and may affect the wilderness values of the adjoining USFS potential wilderness area.

WILDERNESS STUDY AREA 103

White Mountain

GENERAL DESCRIPTION

This area[1] is bounded on the north by Indian Garden Creek Road; on the east by State Route 3A and an access road from Oasis to Canyon Road; on the south by the Cottonwood Creek Road; and, on the west, by the Inyo National Forest RARE II area. Ten percent of the area, a block near Cottonwood Creek Road, is non-public land. The rest is public land. The terrain is flat to rolling on the eastern edge, although most of the WSA is rough and mountainous. The elevation varies from 5,200 feet to 6,289 feet in the northwest corner. This WSA is 80 percent mountainous and 20 percent highly dissected alluvial fans.

WILDERNESS QUALITY

Description of Environment

Terrain is varied in this WSA. The eastern portion is a moderate east-facing slope overlooking the Fishlake Valley. The central and western portions are mountainous foothills with varied rugged canyons along the National Forest boundary. The vegetation is predominantly a light green sagebrush community in the lower eastern portion. In the central and western portions the vegetation is a mixed shrub community with a sparse population of pinyon pines and juniper along the western mountainous edge bordering the National Forest.

Natural Condition

This area appears to have been affected primarily by natural forces, with man's imprint substantialy unnoticeable. The mining activity at Buck Mine, the access road, and the cemetery have been excluded from the WSA. These exclusions, however, are substantially unnoticeable in most of the remainder of the roadless area because of the varied topography which screens them. The few maintenance ways and jeep trails that exist are screened by the varied terrain and vegetative regrowth and are also substantially unnoticeable. A short road to a windmill is excluded from the WSA approximately one-half mile south of the northern boundary.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

This area contains outstanding opportunities for solitude because of the area's relatively primitive character and contiguity to a large RARE II area.

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[1]Portions of T. 5 S., Rs. 36 and 37 E., and T. 6 S., Rs. 36 and 37 E., MDM.

Many opportunities for solitude are provided by the extensive topographical and vegetational variations, vegetation and the large size of the combined areas, both of which screen users from one another. There are many outstanding opportunities for primitive and unconfined type of recreation. The lack of man-made features allows unconfined movement and provides diverse outstanding opportunities for unconfined and primitive type of recreation.

WILDERNESS STUDY AREA RANKING

This WSA was ranked 136 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Data are insufficient for full evaluation of mineral potential in most mineral resource categories. However, there are relatively abundant data for defining the uranium potential in this WSA. All of the northern 80-90 percent of the area is highly favorable for uranium and thorium. Evidence includes a reported occurrence, airborne gamma-ray anomalies, and at least 26 unpatented mining claims. The area of economic interest includes the upland granitics and the adjoining alluvium.

Salable mineral commodities (sand and gravel) exist in alluvial deposits along the eastern 20 percent of the WSA. Past production has occurred just southeast of the WSA boundary and the favorable terrain extends northward into the WSA.

The remainder of the WSA is underlain by materials potentially suitable for crushed and broken rock, which are used in various types of construction. However, the distance to the larger market areas probably precludes any major use of these materials in the near future.

An occurrence of gold (U.S. dependency on imports was 56% in 1979) is reported in the east-central part of the WSA. The environment is favorable for more deposits.

Vegetation

No unusual plant assemblages are found within this WSA. The typical components of the vegetation include: Artemisia tridentata, Atriplex confertifolia, Eurotica lanata, Grayia spinosa, Pinus monophylla, and Juniperus osteosperma. The dominant plant communities include shadscale, sagebrush scrub, and Utah juniper-one leaf pinyon woodland.

Wildlife

This area is comprised of varied topography ranging from lower mountain slopes covered with big sagebrush to mountain ridges covered with pinyon pine and juniper. Cottonwood Creek, containing extensive riparian vegetation, runs for 3 miles along the southern border of this WSA. This is

approximately 50 percent of the riparian habitat present within this drainage. Important wildlife species observed at this site include the yellow-breasted chat and yellow warbler. Another significant species, the pale kangaroo mouse, is present on approximately 3 square miles of valley floor in the northeast section of the WSA. Mule deer occupy the more mountainous sections.

Cultural Resources

Two areas of cultural resources sensitivity are located within the area.

Native American Uses, Needs, and Sites

The Inyo National Forest and adjacent WSAs have traditionally been fully employed by the Paiute and some Panamint Shoshone. At present the area is utilitzed by the Owen's Valley and Mono Lake Paiute. The areas used include seasonally occupied, permanent summer camps and late summer pinyon collection areas. Sites which are religiously and ceremonially important include pinyon collection areas, mortuary sites, and many other cultural and material resources, such as rock art sites, occupation sites, and seasonally occupied camping regions.

Scenic Quality

Overall scenic quality in WSA 103 is "medium." The area includes portions of three scenic quality polygons whose ratings range high to low. Of exceptional scenic quality is Cottonwood Creek, which received top scores for color, water, vegetation, and uniqueness, and a medium score for landform. The number and impact of intrusions throughout the study area are minimal.

General Recreation

The streamside recreational opportunities and access to bristlecone pines have interpretive value.

The southern boundary of the unit is formed by Cottonwood Canyon Road. The Cottonwood Canyon concentrated use zone receives 746 annual visitor use days (VUDs). Recreational uses in this zone include hunting, camping, four-wheel drive touring and access, and rockhounding--none of these activities was evaluated. Cottonwood Canyon is a highly scenic canyon displaying outstanding fall colors.

Range Uses and Potential

This WSA falls within 50 percent of the Oasis Ranch Allotment, which is grandfathered. The entire WSA is within the Piper Mountain Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

The majority of comments received supported the findings.

Study Phase

The majority of letters received about WSA 103 dealt with the study phase. About twice as many of these comments were in favor of wilderness designation of this area as were opposed. Many mentioned the area's contiguity to RARE II lands as making it worthy of designation. Others mentioned the need to protect wildlife, specifically the black toad of Antelope Springs and the Cottonwood Creek Paiute trout. Other concerns were preservation of air quality, the area's flora and scenic qualities, and its historic mining value. These qualities were considered to make the WSA an especially good site for hiking, camping, and backpacking and for geologic and nature study.

The comments opposed to wilderness designation indicated a fear that hunting and fishing would be precluded. The commenters discussed sites outside the area that would affect the area's solitude.

No workbook comments were received on this WSA.

Draft Plan Alternatives

A comment specific to WSA 103, in response to the Draft Desert Plan Alternative, requested a general expansion of the area recommended for wilderness designation in the "Preferred Alternative."

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The White Mountain Wilderness Study Area (103) was recommended as nonsuitable for wilderness designation. The WSA's low relative ranking (136) and the lack of qualities identified as desert-wide wilderness objectives were considerations in this decision. Opportunities for a variety of recreational activities, potential for energy-producing mineral occurrence, and the Oasis Ranch grazing allotment were additional factors which were considered.

The area was recommended for Class L to protect the existing natural values while permitting other limited uses.

IMPACT OF PROPOSED PLAN

The entire area is recommended for Class L. Some impairment of wilderness values can be expected though the degree of impact of various activities allowed under this designation will depend on their specific locations within the WSA. Activities in the western portion may be localized by variations in terrain while those in the eastern portion may be visible over large distances. Motorized vehicle activity along designated routes and the potential for greater mineral development may adversely affect naturalness

and solitude. Assuming no major increases in grazing activities and structures, impacts of this activity would be negligible.

WILDERNESS STUDY AREA 104

Cottonwood Creek

GENERAL DESCRIPTION

This area (3,729 acres)[1] is bounded on the north by the Cottonwood Creek Road, on the east by State Route 168, on the south by the access road to White Mountain City and Wyman Creek, and on the west by the Inyo National Forest RARE II Area. The area is all public lands. The terrain is rough, steep, and mountainous throughout. The elevation varies from 5,295 feet to 7,600 in the northwest. This WSA is 90 percent mountains and 10 percent dissected fans.

WILDERNESS QUALITY

Description of Environment

This large mountainous area is the lower foothills portion of the eastern side of the White Mountains. The terrain is varied with abundant canyons. The foothills appear rounded with many unique rock formations and canyons. On the lower eastern slopes, a low mixed sagebrush/mixed shrub community is found. The mountainous foothill area is covered with mixed shrub species and a sparse pinyon pine/juniper forest that extends into a RARE II area of the Inyo National Forest.

Natural Condition

This area has retained its primeval character and generally appears to have been affected primarily by natural forces. Improvements, such as the Copper Queen Mine access road and a jeep trail, have been excluded from the WSA but are substantially unnoticeable from the surrounding natural area because of the topographical variation and vegetative screening.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The area is adjacent to a RARE II area and is relatively primitive in character, with outstanding opportunities for solitude provided by extensive topographical and vegetational variation. The lack of man-made features permits unconfined movement and provides for diverse outstanding opportunities for an unconfined and primitive type of recreation.

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[1]Portions of T. 6 S., Rs. 36 and 37 E., MDM.

WILDERNESS STUDY AREA RANKING

This WSA was ranked 115 out of 137 WSA.

RESOURCES CONSIDERED

Geology-Energy-Minerals

The WSA has moderately high potential for discovery of ore deposits of base metals. The area around the Copper Queen Mine has been excluded from the WSA; however, the potential for economic mineralization extends beyond the excluded area. The southwestern 80 percent of this WSA has favorable lithology, as well as geochemical anomalies in base metals and rare-earth elements. The potential is particularly good for discovery of copper or molybdenum (both metals are strategic stockpile material). The potential is also good for tungsten, a strategic material--in 1979 the U.S. import dependency was 59 percent of consumption.

The area is considered favorable for uranium-thorium mineralization because of favorable lithology and proximity to a highly favorable area immediately north of the WSA.

The area in the vicinity of White Mountain City has produced sand and gravel. Existing deposits here are estimated to have a fair market value of about $250,000 (at $2.00 per cubic yard). Adjacent to these gravels are deposits of pyrocalstic rock, possibly pumice similar to that which was quarried at a site about 1 mile to the east. Therefore, the potential for development of salable mineral deposits in the lowland parts of the WSA is considered excellent.

Vegetation

No unusual plant assemblages are found within this WSA. The typical components of the vegetation include: Artemisia tridentata, Atriplex confertifolia, Eurotica lanata, Grayia spinosa, Pinus monophylla, and Juniperus osteosperma. The dominant plant communities include shadscale, sagebrush scrub, and Utah juniper-one leaf pinyon woodland.

Wildlife

The terrain is varied and bisected with numerous canyons. Lower elevations contain a sagebrush/mixed shrub community. The higher foothills are covered with mixed shrubs with scatered junipers and pinyon pines. The area is bounded on the north by Cottonwood Creek, which has extensive riparian vegetation. Both yellow warbler and yellow-breasted chat have been observed along the creek. Wyman Creek on the southern boundary is also a permanent stream with riparian vegetation. Other intermittent streams also occur in the area.

Other significant species include the pale kangaroo mouse, found over a small portion along the valley edges, and the prairie falcon which forages over much of the area. Mule deer are found throughout most of the area.

Cultural Resources

Three areas of cultural resource sensitivity are located within the area.

Native American Uses, Needs, and Sites

The area within this WSA has been used traditionally by Fishlake area Pauite for pinyon collection. Bishop - Big Pine area elders have indicated that the area continues to be employed for this purpose by reservation residents in the Owens Valley.

Scenic Quality

Overall scenic quality was rated "medium." All of the key factors (landform, color, vegetation, and uniqueness) received medium scores.

General Recreation

The combination of surface water and five different habitat types attracts many birds to Deep Springs Valley making it an excellent birdwatching area. A small portion of the southern end of this WSA is included in this excellent birdwatching area.

The Cottonwood Canyon concentrated use zone received 46 visitor use days in 1978. Recreational uses in this zone include hunting, camping, four-wheel drive touring and access, and rockhounding. None of these was evaluated. Cottonwood Canyon is a highly scenic canyon displaying outstanding fall color.

Range Uses and Potential

This WSA lies within 15 percent of the Deep Springs Allotment, which is grandfathered. This WSA falls within the Piper Mountain Herd Management Area (HMA).

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments received support the findings.

Study Phase

Of the 20 comments on the study phase received about WSA 104, nearly three-quarters supported wilderness designation. They indicated a need to protect wildlife, especially the Cottonwood Creek Paiute trout, bighorn sheep, golden eagles, hawks, and the black toad of Antelope Springs. Water supplies,

flora, and air quality were common concerns. Geographic features (such as lava flows), historic mining sites, and petroglyphs added to the scenic and educational values many felt this area exhibits. Many opportunities for primitive recreation were mentioned, such as hiking, camping, and backpacking. Deep Springs College stressed its use and enjoyment of the wilderness surrounding its campus, and a few pointed to the area's contiguity to RARE II lands as an important asset to management of this area as wilderness.

The comments opposing wilderness designation indicated a fear that rockhounding and hunting would no longer be feasible recreational activities if wilderness were implemented. Mining interests saw wilderness designation as a threat "to essential economic growth." It was thought that lights and noise from nearby settlements would affect night-time solitude. Some opposing comments discussed the inventory program, saying that it ignored roads and included areas of less than 5,000 acres.

Two letters were received in response to the workbook concerning this WSA. Both were in favor of wilderness designation because the area is easily accessible and because it is used by Deep Springs College as part of the "campus" and would benefit its program.

Draft Plan Alternatives

A comment specific to WSA 104, received in response to the Draft Desert Plan Alternatives, requested a general expansion of the area recommended for wilderness designation in the "Preferred Alternative."

SUMMARY OF RATIONALE FOR PROPOSED PLAN

Wilderness Study Area 104, Cottonwood Creek, is recommended as nonsuitable for wilderness designation. Its low ranking (115) and lack of qualities identified as desert-wide wilderness objectives were significant factors in this decision. In addition, potential mineral values, a variety of recreation activities, and grazing allotments were all considerations.

The area is recommended for Class L designation to protect its natural and cultural resources.

IMPACT OF PROPOSED PLAN

The entire WSA is recommended for multiple-use Class L. The impact of actions within the area are dependent upon their specific locations within varied terrain. Development within the more rugged western half would be less visible from afar while development in the flatter eastern portion would be visible at much greater distance. Adverse impacts to naturalness and solitude may be expected from potential mining development and use of designated routes by motorized vehicles. Impacts from continued grazing should have no significant effect on wilderness characteristics.

WILDERNESS STUDY AREA 105

Wyman Creek

GENERAL DESCRIPTION

This 5,729-acre area[1] is bordered on the north by the Wyman Creek Road and a water diversion canal; on the west by the Inyo National Forest RARE II Area; on the south by a maintained dirt road to Antelope Spring; and on the east by State Route 168 and maintained dirt roads between Deep Springs maintenance station and White Mountain City, as well as other roads to mines within the roadless area. The area is entirely public lands. The terrain is flat near the east and southeast part of the study area but changes to a rolling to rough and mountainous terrain as one proceeds further northwest. The elevation varies accordingly, from 5,210 feet along the east and southeast edge to 6,240 feet at a point near the center of the western edge. This WSA is 35 percent mountains, 35 percent dissected alluvial fans, and 30 percent alluvial fans.

WILDERNESS QUALITY

Description of Environment

The terrain consists of an eroded bajada of moderate slope with several small washes draining from the lower slopes of the White Mountains, which lie along the western edge.

Natural Condition

The area retains its primeval character. A few ways are present but they are not substantially noticeable because of the vegetation and rolling nature of the bajada.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The area offers outstanding opportunities for solitude because of its primitive character and contiguity to the RARE II area. The large size of the combined areas and varied topography provide diverse recreational potential and outstanding opportunities for unconfined movement throughout.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 129 out of 137 WSAs.

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[1]Portions of Ts. 6 and 7 S., Rs. 35 and 36 E., MDM.

RESOURCES CONSIDERED

Geology-Energy-Minerals

The northeastern tip and the southern 60 percent of this WSA are considered favorable for base and precious metal deposits. Lithology, reported occurrences, mining claims, and geochemical anomalies indicate good potential for discovery of this type of deposit, especially for copper, molybdenum, tungsten, lithium, and silver-lead-zinc. The central area has rock units favorable to development of similar deposits, but anomalous geochemical data are lacking.

The entire WSA has potential for uranium or thorium deposits, but the potential is relatively low in the southwestern quarter. The moderate mineral potential of the rest of the area is based on the presence of lithologies similar to those in the highly favorable areas to the north.

A known deposit of sand and gravel, valued at a minimum of $250,000, is located just northeast of the center of the WSA. Most of the rest of the area has rocks favorable for use in crushed rock and broken rock applications. Seven unpatented claims were recorded with BLM as of December 12, 1979. At least some of them appear to correspond geographically to a reported tungsten occurrence.

Vegetation

No unusual plant assemblages are found within this WSA. The typical components of the vegetation include: Artemisia tridentata, Atriplex confertifolia, Eurotica lanata, Grayia spinosa, Pinus monophylla, and Juniperus osteosperma. The dominant plant communities include shadscale, sagebrush scrub, and Utah Juniper-one leaf pinyon woodland.

Wildlife

Wilderness Study Area 105 is located in the northern portion of the Deep Springs Valley. Situated immediately east of the White Mountains, numerous small washes cross the WSA on a west-to-east running slope. The vegetation is heavily influenced by the Great Basin Desert. This includes approximately 2 square miles of shadscale scrub located on the Deep Springs Valley floor. Approximately 5 percent of the shadscale community present within the CDCA is located within WSA 105. There are no known listed species from this area. Approximately 4 square miles is utilized as foraging area for a prairie falcon eyrie located outside of the WSA. Six square miles, representing approximately 2 percent of the range of the pale kangaroo mouse in the CDCA is also located on the valley floor.

Cultural Resources

Two areas of cultural resource sensitivity are located within the area.

Native American Uses, Needs, and Sites

The area within this WSA has been traditionally used by Fishlake area Paiute for pinyon collection. Bishop-Big Pine area elders have indicated that the area continues to be employed for this purpose by reservation residents in the Owens Valley.

Scenic Quality

Overall, scenic quality was rated "medium." The area received low scores for landform and color and medium scores for vegetation and uniqueness. The area does provide a relatively natural backdrop for Deep Springs Valley.

General Recreation

The Deep Springs Crystal Area located in this WSA is of low interpretive value but is a good area for rockhounding. The combination of surface water and five different habitat types attracts many birds to Deep Springs Valley, making it an excellent birdwatching area. The northern portion of this WSA is included in this excellent birdwatching area. The northern portion of the area is included in a concentrated use zone which received 1,337 visitor use days in 1978. Primary uses in this zone are four-wheel drive touring and access, hunting, shooting, and education and research. None of these activities has been evaluated.

Range Uses and Potential

Wilderness Study Area 105 lies within 20 percent of Deep Springs allotment. The WSA is in the Piper Mountain Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Because of comments contesting road designations on earlier maps, further field checks were made and WSAs 106 and 107 were combined with WSA 105 to make a larger roadless area.

Study Phase

All but one of the 20 comments received about WSA 105 addressed study concerns. By far the majority supported wilderness designation. Contiguity to a RARE II area was a common support comment. Many described the scenic aspects of the area that need protection: the 12-foot-tall sagebrush and other flora; and fauna, such as the deer, black toad, bighorn sheep, coyote, and Paiute trout. Petroglyphs and geologic and historic mining values were all discussed as valuable educational and scientific aspects of the area.

The small minority of comments opposed to wilderness designation discussed mining interests and the good rockhounding location at "Deep Springs Crystal."

Letters received in response to the workbook were in favor of this area as wilderness because it dramatically displays desert mountains and it is used by students of Deep Springs College for quiet study and meditation.

Draft Plan Alternatives

A comment specific to WSA 105, received in response to the Draft Desert Plan Alternative, requested a general expansion of the area recommended for wilderness designation in the "Preferred Alternative."

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Wyman Creek Wilderness Study Area (105) is recommended as nonsuitable for wilderness designation. Its low ranking, in addition to its lack of the qualities identified as desert-wide wilderness objectives, were factors in this decision. Competing recreation resources and potential mineral deposits, along with the Deep Springs grazing allotment, were considerations in the recommendation of nonsuitability.

The WSA was recommended for Class L to protect the known natural and cultural values within the area.

IMPACT OF PROPOSED PLAN

The entire polygon, 5,729 acres, is recommended for Class L. The rolling bajada could not absorb many intrusions and still maintain its wilderness values. Grazing has been conducted in the area in the past without degrading the wilderness quality. If continued at the same level, there would not be any significant impacts. Depending upon the location, scope, and extent of mining operations, impacts could be severe and affect both this WSA and the adjoining USFS wilderness area. The operation and support roads would still result in some loss of value, although mitigation is required.

WILDERNESS STUDY AREA 107A

Antelope Spring

GENERAL DESCRIPTION

This area (851 acres)[1] is bounded on the north and west by the Inyo National Forest RARE II Area, on the east by the Antelope Springs access road, and on the south by State Route 168.

The terrain is rolling on the east to quite rough and mountainous on the west. The elevation varies from 5,600 feet near the eastern edge to 6,400 feet near the western edge. The area is all public lands. This WSA is 70 percent dissected alluvial fans, 20 percent mountains, and 10 percent alluvial fans.

WILDERNESS QUALITY

Description of Environment

Terrain is composed of a low-rolling, moderately sloping bajada on the east with several winding washes draining into the Deep Springs Valley. Foothills and canyons are present on the western boundary. The vegetative cover on the east-facing slope is predominantly a light green mixed desert shrub type and grass species. The washes have more mixed desert shrub species, especially within the foothill canyons.

Natural Condition

This area has retained its primeval character, affected primarily by natural forces. The few ways that do exist are substantially unnoticeable due to vegetative screening and the sloping character of the low-rolling bajada.

Outstanding Opportunities for Solitude or a Primitive And Unconfined Type of Recreation

Outstanding opportunities for solitude are provided by the remoteness of the area and topographical variation. Lack of man-made features and contiguity of the RARE II area provide outstanding opportunities for primitive and unconfined types of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 120 out of 137 WSAs.

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[1]Portions of Sections 23, 24, and 26, T. 7 S., R. 35 E., MDM.

RESOURCES CONSIDERED

Geology-Energy-Minerals

There is no information to suggest high potential for any class of mineral resources in this WSA. Various salable commodities probably do exist in extractable quantities and the potential exists for metallic and nonmentallic mineral commodities. However, available information does not suggest that major ore bodies are present here.

Vegetation

No unusual plant assemblages are found within this WSA. The typical components of the vegetation include: Artemisia tridentata, Atriplex confertifolia, Eurotica lanata, Grayia spinosa, Pinus monophylla, and Juniperus osteosperma. The dominant plant communities include shadscale, sagebrush scrub, and Utah juniper-one leaf pinyon woodland.

Wildlife

Wilderness Study Area 107A is located in the transition zone between the eastern slopes of the White Mountains and western side of Deep Springs Valley. The terrain is a low rolling bajada with a shadscale community. The area is influenced primarily by the Great Basin flora. Approximately 5 percent of a relict Great Basin Desert shadescale community present within the CDCA is located within this WSA. The foothill slopes are sage and mixed shrubs. The area is bisected by several washes. Two adjacent springs located in the area support black toads (State-listed as rare) and yellow warblers. One of three known locations for the black toad is located in this area. The valley floor in the eastern half of the area contains pale kangaroo mouse habitat; less than 1 percent of this mouse's habitat lies in the area.

Cultural Resources

No known areas of cultural resources sensitivity have been located within this area. The area, however, has not been systematically surveyed. Six archaeological sites per square mile are predicted to occur within the entire area. Site types could include temporary camps or special activity areas.

Native American Uses, Needs, and Sites

The full extent of the Inyo National Forest and adjacent proposed WSAs has been traditionally employed by the Paiute and a few Panamint Shoshone. Most use continues to be associated with Owens Valley and Mono Lake Paiute. The profile of areas includes seasonally occupied permanent summer camps, late summer pinyon collection camps, and associated areas of cultural sensitivity. Areas of religious and ceremonial significance include pinyon collection sites in some contexts, rock art sites, natural features, watering sites, some temporary but currently occupied camping regions, and many material resource sites.

Scenic Quality

Over-all scenic quality rating is "medium." The area received low scores for landform and color and medium scores for vegetation and uniqueness. The area does provide a relatively natural backdrop for Deep Spring Valley.

General Recreation

The combination of surface water and five habitat types attracts many birds to Deep Springs Valley, making it an excellent birdwatching area. This entire WSA is within this excellent birdwatching area.

Range Uses and Potential

This WSA is in the Deep Springs Allotment (5%), which is grandfathered, and in the Piper Mountain Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Specific comments agreed with the findings.

Study Phase

Ten comments were received about the WSA. Most favored wilderness designation. Protection of wildlife, specifically the Paiute trout, and the educational value of the area were the most common concerns. The availability of water and springs added to the vegetation and scenic values and recreational hiking and camping opportunities of the area. Historic, scientific, and nature study values were also mentioned.

The one comment opposing wilderness designation expressed the fear of mining interests that such designation is a threat to essential economic growth--that mineral potential should be given first consideration in the area.

Letters received in response to the workbook were in favor of wilderness because: the presence of springs makes camping for long periods feasible; Antelope Springs would be protected for wildlife; and the academic program at Deep Springs College would be aided.

Draft Plan Alternatives

A comment specific to WSA 107A, received in response to the Draft Desert Plan Alternatives, requested a general expansion of the area recommended for wilderness designation in the "Preferred Alternative."

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 107A, Antelope Spring, is recommended as nonsuitable for wilderness designation.

Potential for mineral development and the area's location within the Deep Springs grazing allotment were considerations. The area's low relative wilderness rating and the fact that it did not satisfy any part of the desert-wide wilderness objectives were factors in this decision.

The WSA was recommended for designation as Class L. This classification would permit limited use and development while protecting the natural and cultural resources.

IMPACT OF PROPOSED PLAN

This small area, 851 acres, is recommended for Class L. The size of the area precludes extensive activities of any kind. Motorized vehicle activity on designated ways, mining operations, and grazing with associated structures and facilities could saturate the area, severely impacting the wilderness values in the area plus the USFS wilderness; however, mitigation is required.

WILDERNESS STUDY AREA 111

Sylvania Mountains

GENERAL DESCRIPTION

The area (15,450 acres)[1] is bounded on the north by Sylvania Canyon Road, on the east by the California/Nevada state border, on the south by the Cucamonga Road, and on the west by the Eureka Valley Road.

The terrain varies from flat to rolling on the west to rough and mountainous on the east. The elevation varies accordingly, from 5,071 feet in the extreme western portion to 7,998 feet near the California/Nevada state border. The area is predominantly public land, with only 3 percent of the area in random blocks of non-public lands. In addition, three sections in the north-central portion of the area have recorded mining locations. This WSA contains 70 percent mountains, 10 percent alluvial fans, 10 percent highly dissected fans, 5 percent dissected fans, and 5 percent badlands.

WILDERNESS QUALITY

Description of Environment

The area includes the California portion of the Sylvania Mountains, consisting of rugged mountains of varying rock types dissected by several large washes. Plant types are of the sagebrush community at lower elevations and pinyon-juniper higher into the mountain range.

Natural Condition

Mining occurs within the area to a very limited extent and on a small scale. Topographic screening virtually eliminates any impacts this mining might have on the natural conditions. To a noticeable degree, the entire area lacks man's imprint upon the landscape.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The complex topography of the Sylvania Mountains, combined with good vegetative cover, provides ample screening for visitors. The available isolation offers an outstanding opportunity for solitude. The lack of permanent structures which would significantly alter the primeval character and influence of the land also provides the visitor with outstanding opportunities for primitive and unconfined recreation.

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[1]Portions of Ts. 6 and 7 S., Rs. 37 and 38 E., MDM.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 72 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Reported tungsten (strategic material and 59% imported) occurrence and 20 existing claims occur in this WSA. Anomalous geochemical values in silver, lead, tin, beryllium, and the rare-earth elements reflect potential for precious metal (gold, silver) and base metals (lead, tungsten, tin, copper, and molybdenum).

Lithology is similar to that at the southeastern corner of the Sylvania Mountains where a molybdenum porphyry deposit is being explored and developed. Therefore, potential for copper and molybdenum deposits extends throughout the Sylvania Mountains. (Molybdenum and copper are strategic minerals). This WSA is classified as favorable for salable mineral potential in the western Sylvania Mountains (foothills).

Vegetation

No unusual plant assemblages occur within this WSA. General vegetation components include Coleogyne ramosissima, Atriplex confertifolia, Grayia spinosa, and Lycium spp. The area is mostly shadscale and blackbrush types.

Several rare plant species actually have potential for occurring within this WSA. They include Lupinus holmgrenanus, Fendlerella utahensis, Arabis shockleyi, Mimulus rupicola, Sclerocactus polyancistrus, Cymopterus gilmanii, Eriogonum gilmanii, and E. shockleyi. All of these plants are limestone endemics.

Wildlife

Wilderness Study Area 111 is located in the extreme southern portion of the Fishlake Valley and southern portion of the Last Chance Range (Sylvania Mountains), to Cucamonga Canyon. The extreme change in elevation and varied topography allow for diverse assemblages of fauna. This is also reflected in the variety of vegetative types, which include shadscale with Joshua tree, creosote, and which range from Great Basin desert dominated sagebrush scrub at lower elevations to pinyon-juniper woodland at higher elevations in the Last Chance Range. The Fishlake Valley floor included in this WSA contains approximately 8 square miles (2.5%) of the range of the pale kangaroo mouse in the CDCA. Twenty-five square miles of prairie falcon foraging area and one prairie falcon eyrie are also located here. The portions of the Last Chance Range located within the WSA contain approximately 17 square miles of desert bighorn sheep seasonal range, used by the Last Chance herd which is estimated to number 65 individuals; this represents approximately 5 percent of the seasonal and total range of this bighorn sheep herd.

Cultural Resources

One area of very high cultural resource sensitivity is located within the WSA area.

Native American Uses, Needs, and Sites

The Last Chance Range has been traditionally employed by Owens Valley area Paiute for pinyon collection and as a summer camp area. The profile of seasonal use is quite similar to the use pattern described for the White Mountain region (WSAs 100-107).

Scenic Quality

This area rates "very high" in over-all scenic quality. It received top scores for landform, color, and uniqueness, although it received a low score for vegetation. The erosional patterns and extremely colorful exposed strata in the canyons were considered fairly unique in the region. Visual impacts from intrusions are not evident in the landscape.

General Recreation

This WSA contains good deer and chukar hunting along the southwest border. There is fair rockhounding opportunity at the Sulphur Mine. The southern boundary of the WSA is Cucamonga Canyon Road. Cucamonga Canyon is an intensive use zone which received 745 annual visitor use days in 1978. Primary recreation activities are camping, four-wheel drive access, sightseeing, and painting and photography. None of these activities has been rated.

Range Uses and Potential

The WSA is in the Last Chance Allotment, which is grandfathered. The WSA is in the Piper Mountain Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments received supported the findings.

Study Phase

The majority of the comments received favored wilderness designation. Scenic quality was the most common comment. Geologic, historic, educational, nature study, and wildlife values were also expressed. Hiking and photography were enjoyed in the area. Contiguity to RARE II lands and boundary expansion to Death Valley National Monument were management considerations expressed.

The one comment opposing wilderness designation indicated that it "conflicts with existing wild horse and burro management structures" and that wilderness designation would conflict with range improvements.

One letter in response to the workbook was received in favor of this area as wilderness because the solitude and scenic values are exceptionally high.

Draft Plan Alternatives

A comment specific to WSA 111, received in response to the Draft Desert Plan Alternatives, requested the recommendation be changed from "unsuitable" to "suitable" in the Balanced Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 111, Sylvania Mountains, is recommended as nonsuitable for wilderness designation.

The WSA has a reported tungsten occurrence and potential for copper and molybdenum. It is also located within the Last Chance grazing allotment. The area did not satisfy any of the desert-wide wilderness objectives. These factors, along with the area's competing recreation activities, provided the basis for the decision. The WSA was ranked 72 in terms of relative wilderness quality, and it was decided that the competing resource values were more significant.

The WSA was recommended for Class L. Management of the area under this classification would protect the area of high cultural resource sensitivity and the one known falcon eyrie and foraging area.

IMPACT OF THE PROPOSED PLAN

The area was recommended for Class L. The flatlands of the foothills would not be able to absorb many intrusions before the impacts would begin to degrade the wilderness values. Unless extensive mitigation (required for mining) was accomplished, both grazing and mining operations would affect the wilderness quality of the area. Motorized vehicle activity on designated roads would affect the naturalness of the area. The more rugged, northern portion of the Last Chance Range, with its many valleys and canyons would accept these activities with less impact.

WILDERNESS STUDY AREA 112

Last Chance Mountain

GENERAL DESCRIPTION

The area (38,200 acres)[1] is bounded on the north by Cucamonga Canyon road, on the east by the California/Nevada State border, on the south by the Loretta Mine Road and access road, and on the west by the Eureka Valley Road. The terrain is rough and mountainous throughout. The elevation varies from 3,360 feet near the west-central edge to 8,456 feet atop Last Chance Mountain in the northeastern portion of the area. This area is predominantly public land with approximately 5 percent in random blocks of non-public land. There are a number of recorded mining claims in the eastern portion along the California/Nevada border. This WSA is 80 percent mountains, 10 percent alluvial fans, and 10 percent dissected fans.

WILDERNESS QUALITY

Description of Environment

The area is mountainous with many deep canyons and a few springs. The eroding rock formation in the northwestern Cucamonga Canyon contains many shades of red, yellow, blue, and purple. The vegetative cover on the Eureka Valley bajada and mid-elevations consists of the Last Chance Range mixed creosote desert shrub community. The higher elevations of the Last Chance Range are generally mixed desert shrubs with a pinyon pine/juniper forest type of vegetation.

Natural Condition

This area has generally retained its primeval character and appears to have been affected primarily by the forces of nature with the imprint of man's work substantially unnoticeable. Those noticeable works of man which are present have been excluded. These include the abandoned Crater Area mining operations and the Last Chance Spring Mine and access road. The extensive Crater Mining Area consists of many open pits, slag piles, and ways that significantly scar the natural condition of the area. The Last Chance Spring has a maintained access road, stock water source, building, and several open mining shafts. These areas have been excluded from wilderness consideration due to the substantially noticeable works of man which have degraded the natural condition of the immediate area.

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[1]Portions of Ts. 6, 7, and 8 S., Rs. 36, 37, 38, 39 and 40 E., MDM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

This area contains outstanding opportunities for solitude, because of its relatively primitive character and natural condition. Extensive topographical variations and diverse vegetation which screen visitors provide freedom of movement without encroachment from man-made features. The varied topography and vegetation, along with the mountains and the lack of man-made features, provide for unconfined movement and diverse opportunities for a primitive type of recreation.

WILDERNESS STUDY AREA RANKING

This area was ranked 49 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

A major molybdenum deposit (a strategic mineral), with an in-place value of $7.9 billion, and associated favorable terrain exist in the WSA. Geochemical anomalies reinforce mineral potential for molybdenum, lead, zinc, silver, copper, tin, rare earths, and other metals. The area supported past production of mercury (strategic metal--62% imported in 1979) with potential for future production.

The southern part of the WSA experienced sulfur production in the past. Sulfur reserves and known gypsum resources exist here. The favorable terrain for these deposits probably extends throughout the southern half of the WSA. The geologic environment is favorable for limestone, dolomite, and barite deposits.

There is a uranium occurrence in the Hanging Rock Canyon area, although sufficient data are not available to assess the potential for the rest of the WSA.

Approximately the southern third of the WSA, excluding the Sylvania Mountains, has potentially favorable geologic environments in the Last Chance thrust system for oil and gas.

Most of the area has unfavorable geology for sodium and potassium. However, the alluvial area between the Last Chance Range and Sylvania Mountains could contain such deposits, but data are inadequate to evaluate the potential.

The alluvial areas adjacent to the mountains have potential for sand and gravel and clays. The upland areas have potential for crushed and broken rock materials. Remoteness of the area would preclude large near-term demand for these comodities.

Vegetation

No unusual plant assemblages occur within this WSA. General vegetation components include Coleogyne ramosissima, Atriplex confertifolia, Grayia spinosa, and Lycium spp. The area is mostly shadscale and blackbrush types.

Several rare plant species have potential for occurring within this WSA. They include Lupinus holmgrenanus, Fendlerella utahensis, Arabis shockleyi, Mimulus rupicola, Sclerocactus polyancistrus, Cymopterus gilmanii, Eriogonum gilmanii, and E. shockleyi. All of these plants are limestone endemics.

Wildlife

The area contains the northern half of the Last Chance Range and the eastern edge of Eureka Valley. The Last Chance Range is a rugged mountainous range with steep canyons and a few springs; elevations range approximately from 3,300 feet to above 8,400 feet. Pinyon pine and juniper are found in the higher elevations. The Eureka Valley bajada is primarily in a mixed creosote bush desert shrub community; the eastern slopes of the Last Chance Range are in a rich shadscale.

Two proposed sensitive species are known to inhabit the area. The entire Last Chance Range in the WSA provides seasonal range (30 sq. mi) for the desert bighorn sheep. Around Last Chance Peak is a concentration area (10 sq. mi.) for bighorn. The entire Last Chance herd, estimated at only 65 individuals, is believed to be declining in this area because of heavy livestock use on the east side of the range and conflict at Last Chance Spring. Declines here probably have occurred since the early 1970s (Rocklyn Wooley, pers. comm.).

The area contains about 50 square miles of golden eagle foraging habitat; this is about 1 percent of the total for the CDCA. There are two known eyries in this area.

Other significant species include the pale kangaroo mouse found in about 7 square miles in the Eureka Valley. Prairie falcons breed in at least one locale and forage over about 15 square miles of the area. Mule deer inhabit most of the Last Chance Range (35 sq. mi. in the WSA).

Further surveys are likely to reveal even more important and significant wildlife species.

There is a very important riparian area at Last Chance Spring. There is a small, fenced enclosure; the remaining riparian zone is heavily impacted by livestock.

Cultural Resources

One area of high cultural resource sensitivity is located within the area.

Native American Uses, Needs, and Sites

The Last Chance Range has been traditionally employed by Owens Valley area Paiute for pinyon collection and as a summer camp area. The profile of seasonal use is quite similar to the use pattern described for the White Mountain region (WSAs 100-107).

Scenic Quality

The area encompasses "high" scenic quality. It received high scores for landform, color, and vegetation, and a medium score for uniqueness.

General Recreation

Most of the WSA possesses good opportunities for deer and chukar hunting. The area is bordered on the north by Cucamonga Canyon Road. Cucamonga Canyon is a concentrated use zone which received 745 visitor use days in 1978. Uses include camping, four-wheel drive access, sightseeing, painting, and photography. None of these activities has been rated.

Range Uses and Potential

Twenty-five percent of the Last Chance Allotment is in this WSA. The allotment is grandfathered. A portion of the Piper Mountain Herd Management Area is in the WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments supported the findings and also pointed out the varied recreational interests.

Study Phase

Thirteen of the 16 comments received about WSA 112 favored wilderness designation. Scenic quality was the most common value noted. Interest in geologic, wildlife, flora, educational, and historic values was expressed. Hiking, camping, rockhounding, backpacking, climbing, photography, and painting were all activities enjoyed in this area.

Deletion of the southern portion of the WSA, the mining area saddling the mountains near the origin of Hanging Rock Canyon, was suggested. Expansion of the boundary to Death Valley National Monument was also proposed.

The two comments opposing wilderness designation of WSA 112 dealt with mining and rockhounding. The mining interest felt mining should be first priority in wilderness consideration. The other expressed a desire for vehicle access to permit rockhounding with family and camping in the beauty and isolation of the desert.

All letters in response to the workbook were in favor of this area as wilderness because of its accessibility and to protect wildlife and unique botanical values.

Draft Plan Alternatives

A variety of public comments specific to WSA 112 was received in response to the Draft Desert Plan Alternatives. For example, one indicated complete agreement with the Protection Alternative, another expressed the need for strict control of wilderness, while a third insisted on a vehicle-access corridor between the sand dunes and Saline Valley. Another stated that the exploration and development of oil, gas, and geothermal resources were the best uses for the area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 112, Last Chance Mountain, is recommended as nonsuitable for wilderness designation.

The area incorporates a major molybdenum deposit which has an extremely high estimated value. In addition, the WSA has other known geologic, energy, and mineral resources. The area includes the Last Chance grazing allotment and is used for a variety of recreation activities. The area did not meet the criteria outlined in the desert-wide wilderness objectives. It was ranked 49. These factors all contributed to the nonsuitability recommendation.

The WSA was recommended for Class L designation to protect its wildlife, cultural and Native American values, and scenic quality.

IMPACT OF PROPOSED PLAN

The WSA is divided between multiple use Classes L and M. The portion east of Last Chance Canyon is Class M as well as a very small area around Crater. The remainder falls within a Class L designation. The primary development expected within the WSA involves mineral exploitation. The southern one-third contains a variety of economically viable minerals and could be developed. Such development could have harsh adverse effects upon the natural condition of the area, although mitigation is required. The rugged terrain will tend to localize small-scale impacts; however, large-scale mining operations are a possibility and could effectively eliminate the wilderness values over large areas as has already occurred around Crater. Increased motor vehicle access would be a secondary impact along future designated mining areas routes in Classes L and M respectively. Overall, potential adverse impacts to wilderness values under the proposed multiple use class designations range from negative to highly negative depending upon the scope of mineral development.

WILDERNESS STUDY AREA 115

Piper Mountain

GENERAL DESCRIPTION

This area (72,930 acres)[1] has as its eastern border Eureka Valley Road; as its southern border Loretta Mine Road; as its northern and western borders State Route 168, a maintained dirt road from Deep Springs College to Deep Springs Lake, and the Inyo National Forest boundary.

The terrain is rolling to gently sloping to the south in the southeastern portion with the remainder being rough and mountainous. The elevation follows somewhat the same pattern with the lowest area, 3,400 feet along the Loretta Mine Road, to the highest area, 9,792 feet at a point near the northeastern edge of the WSA.

Approximately 95 percent of the land is public. Non-public holdings occur in scattered single sections. There are a number of recorded mining claims. This WSA is 65 percent mountains, 15 percent dissected fans, 10 percent alluvial fans, 5 percent plains, 4 percent hills, and 1 percent riverwashes.

WILDERNESS QUALITY

Description of Environment

The area includes the northern end of Eureka Valley and surrounding mountains which include, to the east, the lower Sylvania Mountains and, to the north and west, the abruptly rising Inyo Mountains. The valley floor ranges in elevation from 3,400 to 4,400 feet and consists of a sagebrush plant community.

The Sylvania Mountains to the east rise to 6,179 feet through the pinyon-juniper plant community. Through this wide range of elevations several plant communities occur: sagebrush scrub and species associated with the white fir community. From the brushy valley floor, the Inyo Mountains have a Joshua tree woodland near the base. Cottonwood and willow dominate the lower canyons, while the upper reaches of these mountains are capped with coniferous types.

Natural Condition

The impact of man's work is substantially noticeable in some areas, primarily as a result of extensive mining. In the southeast corner, the valley floor is pockmarked over a broad area of approximately 15 square miles. These

[1]Portions of T. 8 S., R. 36 E.; Ts. 6, 7, and 8, S. Rs. 37 and 38 E., MDM.

assessment "scrapes" reduce the aparent naturalness of this portion of Eureka Valley. Elsewhere, moderate mining activity has occurred. A small-scale mining and access road is evident around Sugarloaf Mountain at the northern end of the area. Near the point where Loretta Mine Road leaves the Inyo Mountains and enters Eureka Valley, there is a relatively large-scale mining operation which is now apparently inactive. There are several mining structures and some large tanks for water and acid storage. These areas where man's imprint is substantially noticeable are excluded from further wilderness consideration. Generally, the area retains its apparent naturalness throughout. The mining activity that occurs is generally screened from visitors by the rugged topography of the Inyo Mountains and by the diverse vegetation types. Areas excluded due to the absence of apparent natural condition occur near the point where Loretta Mine Road enters Eureka Valley, an area of approximately 15 square miles in the southeast corner of the roadless area, and portions of Deep Springs Valley west of the mountain/valley interface.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The rugged topography of the Inyo Mountains and isolated canyons of the Sylvania Mountains provide ample separation from other visitors and afford an outstanding opportunity for solitude. From exposed slopes of these mountains, vistas of the Saline Range and other large features present a feeling of vastness, further enhancing the sense of solitude. The area is composed of a diversity of terrain and vegetation which contribute to opportunities for primitive and unconfined types of recreation.

WILDERNESS STUDY AREA RANKING

Out of 137 WSAs, this area was ranked 61.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Good potential for deposits of base metals exists in the northern and southern portions of this WSA. The evaluation is based on reported occurrences, field-verified occurrences, highly favorable geologic environment, magnetic anomalies, and geochemical anomalies. The potential for discovery of metallic deposits is considered excellent. Particularly probable are deposits of copper, molybdenum, tungsten, and lead-silver. Also magnetic iron deposits of contact metamorphic origin may occur in these two areas. The total area so classified is about 30 square miles. Lithium may occur in Eureka Valley, probably in lithium-rich clay.

A past producer of limestone/dolomite, favorable geologic terrain defines a high potential along the Loretta Mine Road on the southern edge of the WSA.

Two areas of uranium-thorium potential occur in the WSA. The first is an area of about 2 to 3 square miles in the northern Inyos just north of Deep

Springs College. The second is at the southern end of the area adjacent to the Loretta Mine Road. These areas were discovered by an airborne gamma-ray survey and are located in areas of favorable geology.

A sand and gravel deposit (estimated value $250,000) in the southern edge of the WSA and a pumice deposit containing possibly one million tons of accessible material located adjacent to the Deep Springs-Oasis highway have had past production. These have good potential for future production. Additionally an area in Sections 25, 26, 35, and 36, T. 6 S., R. 37 E., has potential for deposits of pumice.

Vegetation

One unusual plant assemblage occurs within this WSA. It is the northernmost stand or "forest" of Joshua trees (Yucca brevifolia) in the California Desert, although a few individuals occur farther north at the mouth of Wyman Creek in the White Mountains. About 50 percent of this unusual assemblage occurs in this WSA, the rest in WSA 117. The species components of the region's vegetation, which consists of sagebrush, shadscale, and pinyon-juniper types, includes: Artemisia tridentata, Atriplex confertifolia, Eurotica lanata, Grayia spinosa, Juniperus osteosperma, Pinus monophylla, and Yucca brevifolia. Only one rare plant species, Amptantha scoparia, occurs within this WSA.

Wildlife

Wilderness Study Area 115 covers approximately 115 square miles, including the northern edge of the Eureka Valley, the southwestern portion of the Sylvania Mountains, Piper Mountain to the north, and the northeastern section of the Inyo Mountains to the west. Elevations are variable, ranging from approximately 3,400 feet at the valley floor to over 9,700 feet in the Inyo Mountains. The varied topography and extreme range in elevation support a wide array of plant associations. The Deep Springs Valley floor is dominated by Sarcobatus, shadscale, and sagebrush scrub, heavily influenced by the Great Basin Desert. The Eureka Valley has a creosote community. Mountain canyons are dominated by cottonwood and willow; lower slopes contain pinyon-juniper woodland which ranges to white fir at higher elevations. A Joshua tree-shadscale community is present near the base of the Inyo Mountains.

The wide array of habitat types present in the WSA support a varied faunal assemblage. This includes approximately 4 square miles of black toad habitat at Deep Springs, one of three known sites. This represents fully 80 percent of the known range of this State-listed rare species. Approximately 5 square miles of seasonal range of the Last Chance Range desert bighorn sheep herd, estimated at 65 individuals, is located in the southeastern section of the WSA; 24 miles of former bighorn sheep range in the Inyo Mountains is also present here. Fully 100 percent of the range of an extirpated desert bighorn sheep herd located in the northern Deep Springs Mountains is located here. Extirpation occurred within the last decade. Approximately 3 percent of the range used by the Last Chance bighorn herd, including 5 percent of the seasonal range used by these sheep, is also present. A single prairie falcon

eyrie and 30 square miles of foraging area, as well as 8 square miles of golden eagle foraging area, a BLM proposed sensitive species, are located within WSA 115.

The Eureka Valley floor contains approximately 5 square miles of shadscale and/or mixed creosote scrub community, a Great Basin Desert plant association of rare distribution in the CDCA. This area, and surrounding valley, contains 30 square miles of range of the pale kangaroo mouse, essentially a Great Basin Desert species of limited distribution in California. Western pipistrelle bats have been recorded from two sites here. Thirty square miles of mountain habitat support a concentration of mule deer.

Cultural Resources

Four areas of cultural resource sensitivity are located within the area.

Native American Uses, Needs, and Sites

The Inyo Mountains and Saline Range contain numerous natural and cultural resources of particular value to the Owens Valley Paiute and Shoshone. The range continues to be used annually for the collection of pinyon by both Paiute and Shoshone from Owens Valley area reservations. Rock art sites which are particularly sensitive are distributed throughout the range. The ritual and religious significance of pinyon camps and collection activities have been mentioned repeatedly. Paiute and Shoshone runner villages are located within the study area.

Scenic Quality

The area has an over-all scenic quality rating of "medium." The Piper Mountain area was rated low-medium, while North Eureka Valley and the Inyo Mountains were rated "high." The Eureka Valley portion of the study area is considered fairly unusual in the region due to its vast, unintruded character.

General Recreation

The WSA contains the principal collection area of two species of Helicoplacoidea (a new class of Echinodermata). This site has low interpretive value. The area is bounded on both the east and west by concentrated use zones. Total visiter use days in 1978 of these three zones was 2,655. Recreational activities include four-wheel drive touring and access, camping, sightseeing, hunting, shooting, painting and photography, and education and research.

Range Uses and Potential

Portions of this WSA lie within the Deep Springs allotment (20% of allotment), South Oasis allotment (30% of allotment), and Last Chance allotment (5% of allotment). All allotments are grandfathered. The WSA contains a major portion of the Piper Mountain Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Many specific comments were received which sought to clarify boundaries and evaluations of roads and ways--some included discussions of points in the Wilderness Act. Following field examination by staff, appropriate changes were made and are reflected in the current map and narrative.

Study Phase

All but four of the 37 comments received on WSA 115 favored wilderness designation. Scenic quality was the most common value noted: "the view from the top of Chocolate Mountain is one of the best in the desert region." Primitive recreation was often mentioned, with hiking, backpacking, birdwatching, and photography as specific recreation activities.

Wildlife study and protection were discussed. Specific species were the Utah black-headed snake and the black toad. Educational, historic, geologic, and cultural study were all mentioned as wilderness values.

The two comments opposing wilderness designation related to activities that would be curtailed under wilderness management--hunting and grazing.

Several boundary changes were proposed: (1) delete the strip of land west of the divide between Deep Springs and Eureka Valley; (2) combine WSA 115 with WSAs 108 and 114-12 into a single study area; (3) combine WSA 115 with WSAs 108 and 109; and (4) combine WSA 115 with WSAs 113, 114, and 108.

All letters received in response to the workbook favored this area as wilderness. There is a diverse array of geologic formations, plant and animal life, and the area is within a short hiking distance of Deep Springs College.

Draft Plan Alternatives

Comments specific to WSA 115 were received in response to the Draft Desert Plan Alternatives. The comments ranged from agreement with the Protection Alternative, strict control of wilderness, to a suitable recommendation for the study area in the Balanced Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 115, Piper Mountain, is recommended as nonsuitable for wilderness designation. The site displays good potential for base metals. Particularly probable are deposits of copper, molybdenum, tungsten, and lead-silver. The area is also divided by three grandfathered grazing allotments: Deep Springs, South Oasis, and Last Chance. This WSA's relative wilderness ranking was 61, which placed it approximately in the middle of all WSAs. Recreation, motorized and nonmotorized, is a prime activity in the area.

In consideration of the above, in addition to the fact that the area did not meet the criteria outlined by the desert-wide wilderness objectives, it was determined that the values of competing uses of the area were more significant than its wilderness value.

To protect the area's natural and cultural values, black toad habitat, prairie falcon and golden eagle foraging sites, and areas of both high and very high cultural resource sensitivity, most of the WSA is recommended for designation as Class L. This designation will permit access for further exploration of mineral resources.

IMPACT OF PROPOSED PLAN

Approximately 97 percent of this WSA is within a Class L designation. The remainder, a small region at the north end of Joshua Flat, is in Class M. Apparent mineral potential is relatively high throughout the WSA. Though the rugged terrain may localize some impacts, effects to the natural condition and or solitude could be severe in some areas, reducing the over-all wilderness suitability. Subsequent development and use of access routes to areas of mineral development and along designated and identified routes will further degrade wilderness characteristics. Overall, the class designations in this WSA will have a potentially highly negative impact.

WILDERNESS STUDY AREA 117

Saline Valley

GENERAL DESCRIPTION

This area (418,015 acres)[1] includes Saline Valley and the southern half of Eureka Valley. It is located adjacent to Death Valley National Monument which, in conjunction with a graded dirt road, forms the eastern boundary. The long western border is defined by the graded Saline Valley dirt road and a small portion of the Inyo National Forest. The southern edge is located along a spur of the Saline Valley road to mining activity northwest of Ubehebe Peak. Another graded dirt road which forms the northern limit of the site passes through the Joshua Flats area and runs eastward into Nevada.

The terrain varies from flat to rolling in the north and northeast, sloping to the southeast towards playas near the Eureka Sand Dunes. The remainder of the area is rolling to steep and mountainous. The elevation varies accordingly, with the low of 1,150 feet being found in the southwest portion in the Saline Valley to a high of 8,674 feet atop Dry Mountain in the east-central part of the study area.

This area includes approximately 20 sections of non-public lands which, except for a small concentration in the vicinity of the dry lake, are generally scattered. There is a withdrawal for public water reserve in the west-central portion in Section 9, T. 11 S., R. 37 E., MDM., which was withdrawn by Executive Order of December 1, 1913, for Public Water Reserve.

This WSA contains 60 percent mountains, 10 percent plains, 10 percent alluvial fans, 3 percent riverwashes, 3 percent dissected fans, 3 percent sand covered alluvial fans, 2 percent plateaus, 2 percent playas, 2 percent sand dunes, 2 percent highly dissected fans, 2 percent hills, and 1 percent sand-covered plains.

WILDERNESS QUALITY

Description of Environment

Saline Valley, the Saline Range, Last Chance Range, Eureka Sand Dunes, Eureka Valley, and Inyo Mountains are the prominent physical features of the region. The landform changes from flat, white, dry lake to heavily vegetated salt marsh, to low rolling hills, to sand dunes, to rugged mountain ranges. Areas

[1]Portions of T. 8 S., Rs. 37 and 38 E.; T. 9 S., Rs. 36, 37, 38, 29, 40, and 41 E.; T. 10 S., Rs. 36, 37, 38, 29, 40, 41; T. 11 S., Rs. 37, 38, 39 and 40; T. 12 S., Rs. 37, 38, 39, and 40; T. 13 S., Rs. 37, 38, 39, and 40; T. 14 S., Rs. 39 and 40 E.; and T. 15 S., Rs. 39 and 40, MDM.

of highly colorful "badlands" topography can also be found. Vegetation is as varied as the topography. Within the dry salt lake there is no visible plant life at all. Adjacent to it, in the salt marsh, vegetation abounds and, although number of varieties is limited, density provides an oasis-like green area in an otherwise barren environment. In the marsh, tall cattails and other reedy plants thrive, as well as a dense growth of cat-claw. Vegetation changes dramatically with elevation and dense stands of pinyon pines and juniper are abundant. At lower elevations are the grassy valleys, joshua trees, creosote, and low shrubs.

Natural Condition

Part of the northern portion of the area is currently being mined, with effects readily visible. This activity has degraded the naturalness of that site to the extent that it no longer meets minimum criteria. It has been excluded from further wilderness consideration. Other excluded portions are mining roads, mines, and dwellings in Jackass Flats. Three mineral hot springs are located in the Saline Valley. Two are heavily used for recreation, with associated permanent construction degrading the naturalness of the sites. The third spring is a protected desert pupfish habitat. The springs are joined by a road which meets the Saline Valley Road. Some remains of an old salt tram, which was used to transport salt in the early 1900s from Saline Valley over the Inyo Mountains to the city of Swansea, are still standing. The condition of these structures varies, but the historical importance of this tram far outweighs any degradation it might create to the primeval character of the site. There is a county-maintained road into Eureka Valley to the sand dune area. Eureka Valley otherwise retains its primeval character. In terms of overall impacts, man-made features are insignificant and entirely mitigated by the overwhelming size of the roadless area, topographical features, vegetation, and historical value.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The vastness of the area and the general absence of the effects of man provide a setting which supports a feeling of isolation and insures solitude. This roadless area will support an unlimited number of primitive types of recreation. The location next to administratively endorsed wilderness in Death Valley National Monument further enhances primitive recreation potential.

WILDERNESS STUDY AREA RANKING

This WSA ranked 1 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

This WSA contains numerous areas which produced minerals in the past, as well as other areas of high potential. Gold was mined from the alluvium in Marble

Canyon. In 1918-19, an undetermined amount of ore containing 11.6 percent lead and 8 ounces per ton of silver was mined from rocks of Mississippian age in Jackass Flats. This area coincides with a significantly high geochemical lead value. Lead and silver are both strategic--45 percent of the 1979 U.S. silver consumption was imported. Through 1951, at least 13,000 short tons of sulfur were mined from the Crater area in the Last Chance Range. Ore reserves containing 40 percent sulfur exceed 1.3 million tons. The primary use of sulfur is agricultural, although it is vital as a catalyst and intermediate reagent in a variety of chemical and fertilizer industries. The Crater area extends into WSA 117.

The geologic environment of the area south of Lower Warm Spring (37.8°xC) is classified by the U.S. Geological Survey (U.S.G.S.) as a Known Geothermal Resource Area (KGRA). The topography is suitable for generation-plant siting, and potential markets for the generated electricity are nearby.

The central Salt Lake area in Saline Valley has been classified by the U.S.G.S. as valuable for sodium and potassium. This area has a high potential for these commodities. There is also a high potential for borates and halite, which have been mined here in the past. The surrounding area has medium potential for sodium, potassium, and borates. Borates are vital in the manufacture of fiberglass, high-temperature glass, etc. The major source of borates at Boron will probably be depleted during the life of the Plan. Other sources of borates may have to be developed, and this may be one of them.

There are numerous other areas of mineral occurrences and of mineral potential in WSA 117 in addition to Salt Lake. Uranium and lithium concentrations in the ground water in Eureka Valley indicate medium potential for such minerals. The Eureka Valley Dunes contain at least 150 million short tons of quartz sand; however, the distance to potential markets will inhibit production. Gold, copper, and tungsten are reported on the east side of Jackass Flats. Copper and tungsten are strategic; 59 percent of the gold and 13 percent of the copper used by the U.S. in 1979 were imported. A bedded deposit of manganese occurs near Upper Warm Spring. This deposit is reported to contain 20 to 40 percent manganese, a strategic mineral of which the U.S. imports 98 percent of its needs.

Geochemical data indicate chromium anomalies in the mountains about 10 miles west of Ubehebe Peak. No occurrences are reported, although there are three mining claims--the potential for chromium deposits is speculative to medium. Chromium is a vital part of stainless steel and lightweight, high-strength steel alloys. The U.S. is almost totally dependent on the U.S.S.R., Zimbabwe, and South Africa for its chromium supply.

Much of the WSA has speculative mineral potential. Depending on market conditions, exploitation of cinder, clay, and other salable deposits could become economically feasible. Use of local sand and gravel to maintain local county roads can be expected.

Areas of potentially favorable environments for metallic and nonmetallic deposits abound in WSA 117. These areas, partly because of inadequate data, have speculative mineral potential. They are:

(1) Areas in the northwestern part of the WSA with older alluvium similar to that in nearby Marble Canyon which have speculative potential for placer gold.

(2) Jackass Flats, which has speculative potential for lead, a strategic mineral, because of its lithologic similarity to nearby lead deposits.

(3) Northern Eureka Valley, north of the U.S.G.S drilling area, which has speculative potential for lithium and uranium, and includes a gamma-ray uranium anomaly.

(4) The area between Joshua Flats and Cowhorn Valley, which has a potentially favorable geologic environment for talc, a strategic mineral. Two mining claims were recorded with BLM in December 1978 in this area.

(5) The southern part of Eureka Valley, which has speculative potential for saline minerals.

(6) The Last Chance Range, which may be within the overthrust belt, a prodigious oil and gas producer in other states and Canada. This area has speculative potential for oil and gas.

(7) The southern Saline Range and part of Saline Valley, which contain a gamma-ray uranium and thorium anomaly. Because of the local volcanic rocks and broken structure, this area may contain structural traps and has speculative potential for uranium and thorium.

(8) The entire Last Chance Range, which contains lithology potentially favorable for metallic deposits.

(9) Six areas in the southern Saline Range which coincide with gamma-ray potassium anomalies, an indicator of favorable environment. Potential in these areas is extremely speculative.

Vegetation

Three unusual plant assemblages are located within this WSA. One, the Eureka Valley Joshua tree forest, is shared with WSA 115; the other two, the Eureka Dunes and Last Chance Range Calciphytes association, are wholly contained within the WSA. The general vegetational makeup of the WSA varies from sand dune (psammophytic) to Utah juniper-one leaf pinyon woodland, including also, creosote bush scrub, allscale scrub, shadscale scrub, blackbrush scrub and hopsage scrub.

Wilderness Study Area 117 is one of the richest areas for rare plants in the entire CDCA. Most of them are located in the immediate vicinity of the Eureka Dunes and Last Chance Range. The CDCA's only federally listed plant species are found on the Eureka Dunes--Oenothera avita ssp. eurekensis and Swallenia alexandrae. Within the Last Chance Range Calciphytes association can be found the rare limestone endemics:

Enceliopsis nudicaulis
Mimulus rupicola
Cymopterus gilmanii
Dedeckera eurekensis
Buddleja utahensis
Penstemon calcareus
Stipa arida
Fendlerella utahensis
Sclerocactus polyancistrus

Other rare plants include Astragalus cimae var. sufflatus and A. lentiginosus var. micans.

Wildlife

Wilderness Study Area 117 covers approximately 717 square miles of varied topography, encompassing sand dunes, valley floors, rolling hills, and rugged mountain slops. This includes the Saline Valley, Saline Range, southern end of the Eureka Valley, and southern sector of the Last Chance Range. The varied topography and extreme range in elevation support a tremendous variety of vegetative associations from Joshua tree-creosote-burrobush scrub at lower elevations to pinyon-juniper woodland on mountain slopes. The Eureka Dunes, covering approximately 5 square miles, contains an assemblage of rare plants such as Eureka Dune grass. Several species of endemic dune beetles are also located here. This dune system, with its unique plants and animals, is only present within this WSA.

The most significant vertebrate species present on the valley floor of this WSA is the pale kangaroo mouse. Essentially a Great Basin desert species, the pale kangaroo mouse is present in isolated areas within the Saline and Eureka Valleys, representing 30 percent of the total range of this species in the CDCA.

Canyon systems with springs and associated riparian vegetation are also important to wildlife in this WSA. Important wildlife species observed in these areas include the yellow warbler (1 site) and the Utah black-headed snake (1 site). Eight springs are located in a canyon separating the Eureka and Saline Valleys. Canyon systems and surrounding mountain slopes provide habitat for concentrations of mule deer, which range over 150 square miles of this WSA.

Mountain ranges provide eyries for such important raptor species as the golden eagle and prairie falcon. Four eyries and 275 square miles of foraging area for golden eagles are located in this WSA. Nine prairie falcon eyries and 230 square miles of foraging area are also located here.

Desert bighorn sheep range extensively over the WSA; this includes 8 square miles of concentration area, 5 square miles of permanent range, and 140

square miles of seasonal range in the Last Chance Range. The Saline Range includes 180 square miles of desert bighorn sheep transient range. This accounts for 90 percent of the total area used by the Last Chance Range herd, including 50 percent of bighorn concentration area, 20 percent of permanent range, 80 percent of seasonal range, and 100 percent of transient range.

Cultural Resources

Thirteen areas of cultural sensitivity are located within this WSA. Included within these areas are 40 square miles of sensitivity, 85 square miles of high sensitivity, and 102 square miles of very high sensitivity.

Native American Uses, Needs, and Sites

The Inyo Mountains and Saline Range contain numerous natural and cultural resources of particular value to the Owens Valley Paiute and Shoshone. The range continues to be used annually for the collection of pinyon by both Paiute and Shoshone from Owens Valley area reservations. Rock art sites which are particularly sensitive are distributed throughout the range. The ritual and religious significance of pinyon camps and collection activities has been mentioned repeatedly. Paiute and Shoshone runner villages are located within the study area.

Scenic Quality

This area is one of the most scenically outstanding sites within the CDCA. It includes approximately six scenic polygons which were all classified as high. Top scores were given to all key factors (landform, color, vegetation, and uniqueness). The number and impact of intrusions are minimal.

General Recreation

This area includes several sites with interpretive value. The Eureka Sand Dunes and the Saline Valley in general have been rated high. Other non-evaluated potential interpretive sites include the Last Chance Mountains and Saline Lake and salt marsh. There are two teaching and research sites which are used by pre-college, college, and university groups. The Eureka Dunes area is used 5 to 7 times per year; the Saline Valley is used more than eight times per year. Good floral displays can be found in the southern Eureka Valley and in the Saline Valley. There are good opportunities for chukar and deer hunting in the Last Chance Mountains and quail hunting in the Saline Valley and excellent opportunities for birdwatching in the Saline Valley. This unit includes or is bounded by several intensive use zones including the Eureka Dunes, the Saline Valley, Warm Springs, the Saline salt marsh and lake, and the Marble Canyon/Wacoba area. Total annual visitor use days in 1978 for these zones was 25,231 with the vast majority (19,383) concentrated at the Warm Springs. The primary recreation uses are four-wheel drive and motorcycle touring and access, hobby prospecting, hiking and backpacking, and use of the warm springs.

Range Uses and Potential

Only a small portion of the Last Chance Allotment is in the WSA. The Saline Valley burro herd is almost completely in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Many comments were received which discussed all inventory considerations for the area. As a result, the area was reviewed in the field on several occasions and changes were made where appropriate.

Study Phase

Of the 78 comments received, a slight majority favored wilderness designation. Scenic quality was by far the most commonly expressed value, with the Eureka Dunes often cited. Protection of vegetation from grazing, burros, and motorized vehicles was also frequently discussed. Educational, geologic, historic, cultural, and scientific values were mentioned. The hot springs were often mentioned by those for and against designation. Those favoring wilderness want to see the springs and surrounding vegetation and wildlife protected. Those opposing wilderness designation wanted vehicle access to the hot springs for recreational enjoyment. Multi-day backpacking and camping were specific primitive recreation activities discussed. The area's contiguity to RARE II lands and the Death Valley National Monument were factors that were seen to improve the area's management as wilderness.

The comments opposing wilderness discussed activities that would either be limited or disallowed under wilderness designation. Possible mineral and geothermal potential and recreational use were commonly mentioned. The area is desired as a motorized vehicle use area, for hunting, camping, and vehicle access to hot springs and petroglyphs. Sites and sounds were mentioned that adversely affect wilderness quality, such as air traffic and heavy ORV use.

Thirteen comments were received in response to the workbook. Many favored designation of the area as wilderness or restricted to motorized vehicle use. Opinions on both maintaining and closing the Saline-Eureka Dunes corridor were expressed. Concern for the trespass activities in and around the Warm Springs was mentioned. Two letters which strongly opposed the closing of the area to motorized vehicle use were included. It was also suggested that not enough consideration was given to multiple-use of the area.

Draft Plan Alternatives

The following public comments specific to WSA 117 were received in response to the Draft Desert Plan Alternative. Some agreed with the Protection Alternative, others thought talc deposits should be eliminated from inclusion in wilderness. It was suggested that the Balanced Alternative recommend the study area as suitable. Needs for strict control of wilderness and of vehicle access routes were pointed out. It was expressed that the

exploration and development of oil, gas, and geothermal resources were the best uses of the area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

A major portion of the Saline Valley Wilderness Study Area (117) was recommended as suitable for wilderness designation. Its acknowledged quality as a wilderness resource, reflected in the fact that it was ranked 1 out of 137 WSAs, was one determining factor. The area's location adjacent to administratively endorsed wilderness within Death Valley National Monument and the presence of both representative landforms and unique features, enhanced its overall value in terms of the desert-wide wilderness objectives. Although it was recognized that conflicts existed between the potential mineral resource values and wilderness values, it was determined that, within that portion of the WSA recommended as suitable, the value of the wilderness resource exceeded the value of the mineral resources.

The Saline Valley floor, in the southern portion of the WSA was recommended for Class L designation. This class allows geothermal exploration and development and access to and limited development of known mineral assets. A portion of the southwestern edge was placed in Class L to allow access to existing and potential mining operations. While providing for multiple-use, this classification would insure adequate protection of all natural and cultural values.

Three areas, Hanging Rock Canyon, Marble Canyon, and Jackass Flats were all placed in Class M because of existing and potential mining activity.

IMPACT OF PROPOSED PLAN

Portions of the WSA are recommended for Class L and Class M designations. The Class L region includes most of the floor of Saline Valley toward the south end of the WSA and comprises approximately 25 percent of the area. Some degree of impacts from mining may result from this designation. They would affect the apparent natural condition here as they would tend to be visible over a large distance. This site could not absorb the activities permitted by the class guidelines without impacting wilderness values. Small localized areas of Class M designated lands occur near Crater and in the Inyo Mountains near Joshua Flat. These include isolated areas where intensive mining has impacted the natural condition. These sites have relatively localized impacts due to the terrain. These Class M areas should not further degrade wilderness characteristics in the WSA.

WILDERNESS STUDY AREA 117A

Lower Saline Valley

GENERAL DESCRIPTION

The area (6,880 acres)[1] is adjacent to an administratively designated wilderness area in Death Valley National Monument to the east. The southern border is a maintained road to mining claims in the Panamint Range. The western boundary is Saline Valley Road, and the northern boundary is a dirt road to mining claims in the Panamint Range.

The terrain varies from flat and rolling on the west to rough and mountainous on the east. Elevations vary from a low of 1,422 feet in the northwestern corner to a high of 3,560 feet in the southeastern portion of the site. The area contains one-half section of non-public land on the southeast boundary. This WSA contains 25 percent mountains, 25 percent alluvial fans, 20 percent dissected fans, 20 percent highly dissected fans, and 10 percent plains.

WILDERNESS QUALITY

Description of Environment

The boundaries include the lower slopes of the Panamint Range along the Death Valley National Monument boundary and a highly eroded south slope of Saline Valley. The creosote bush scrub plant community is the only type of vegetation represented.

Natural Condition

With the exception of a small area around mining claims along the north and south boundaries, the entire area retains its natural character and is affected primarily by natural forces.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Located within Saline Valley, the area is adjacent to vast areas relatively untouched by the works of man. Opportunities for solitude are outstanding because of the vastness and remoteness of the area and adjacent land within the valley. Opportunities for primitive and unconfined types of recreation are also present.

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[1]Portions of Sections 28, 32 and 33, T 14 S., R. 40 E.; and Sections 3-10, 16-18, and 20, T. 15 S., R. 40 E., MDM.

WILDERNESS STUDY AREA RANKING

This WSA was ranked 122 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. There are no reported mines, mining claims, or mineral occurrences in this WSA. The geologic environment of the Lippincott lead mine may extend into the extreme southeastern part of the WSA. This area has high potential for exploration and possibly development. The western part of the WSA has medium potential for sodium, potassium, and geothermal energy, and speculative potential for salable commodities and radioactive deposits. The potential for locatable nonmetallic minerals is undetermined but possibly favorable.

Vegetation

No unusual plant assemblages occur within WSA 117A. The makeup of the vegetation within the WSA consists mostly of allscale, creosote bush, and hopsage scrub.

Wildlife

Bighorn sheep and mule deer may be found in the higher, eastern portion of the WSA. The bighorn herd uses the area as permanent range; however, the herd of 65 individuals using the Last Chance Range is thought to be declining. Approximately 2 percent of the total range used by the bighorn herd, including 5 percent of the permanent range, is present in this WSA.

Cultural Resources

One area of known high cultural resource sensitivity is located within the WSA.

Native American Uses, Needs, and Sites

The WSA includes portions of the southeastern Saline Valley traditionally occupied by the Paiute. Little inventory data are available. The area does lie in immediate proximity to higher mountain resource use areas of extreme sensitivity.

Scenic Quality

The study area encompasses a small portion of a highly scenic area. The two scenic-quality polygons of which this unit is a part generally received high scores for landform, vegetation, color, and uniqueness. The high uniqueness

ratings resulted from the visual combination of landform, vegetation, and spectacular views.

General Recreation

Good quail hunting and excellent birdwatching areas can be found throughout the WSA.

Range Uses and Potential

No allotments fall within this WSA. However, the area lies in the Saline Valley Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Many comments were received which discussed all inventory considerations for the area. As a result, the area was reviewed in the field on several occasions and changes were made where appropriate.

Study Phase

Of the 78 comments received, a slight majority favored wilderness designation. Scenic quality was by far the most commonly expressed value. Protection of vegetation from grazing, burros, and motorized vehicles was also frequently discussed. Educational, geologic, historic, cultural, and scientific values were mentioned. Multiple-day backpacking and camping were specific primitive recreation activities discussed. The area's contiguity to the proposed Death Valley National Monument wilderness area was a factor which was seen to improve this WSA's management as wilderness.

The comments opposing wilderness discussed activities that would either be limited or disallowed under wilderness designation. Possible mineral and geothermal resource potential and recreational use were commonly mentioned. The area is desired as a motorized vehicle use area and for hunting, camping, and vehicle access. Sites and sounds that adversely affect wilderness quality, such as air traffic and heavy ORV use were mentioned.

Draft Plan Alternatives

The following range of public comments, specific to WSA 117A, were received in response to the Draft Desert Plan Alternatives. Some agreed with the Protection Alternative, but others recommended a reduction in the amount of Saline Valley that was found suitable. Some said, the Balanced Alternative should recommend the study area as suitable for wilderness. Opinion was also expressed that the exploration for and development of oil, gas, and geothermal resources were the best uses for the area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The eastern portion of WSA 117A, Lower Saline Valley, is recommended as suitable for wilderness designation. This part, which includes the more rugged mountainous area, borders on the administratively endorsed wilderness area within Death Valley National Monument. Since this meets one of the desert-wide wilderness objectives, it was an important aspect of the decision. The western portion of this WSA is recommended as nonsuitable for wilderness designation. This relatively flat portion, which is part of the Saline Valley floor, is an alluvial fan. The fan possesses potential for sodium and potassium mineral development. This area also has recognized potential for geothermal energy development. The entire area's relative wilderness ranking is low, 122 out of 137.

That portion of the WSA which was not recommended as suitable was recommended for designation as Class L. Although the majority of natural and cultural resources can be found in the area recommended as suitable, one culturally sensitive area is located on the alluvial fan. The Class L designation would protect this resource.

IMPACT OF PROPOSED PLAN

The western half of the WSA is designated Class L. Potential for development of mineral potential is low. No significant impacts to wilderness characteristics are expected.

WILDERNESS STUDY AREA 118

North Death Valley

GENERAL DESCRIPTION

The area (8,830 acres)[1] is the most northern portion of Death Valley and is bounded on the north by a ranch/mine road, on the northeast by the California/Nevada state border, on the southeast by a ranch access road, and on the southwest by the Death Valley Road. The elevation varies from 2,960 feet in the south to 3,880 feet along the northern boundary. The area is approximately 90 percent public lands with one section of non-public land. It should be noted that, along the southwestern edge, Sand Springs (SE-1/4 SE-1/4, Section 7, T. 95., R. 41 E. MDM), and Little Sand Springs (W-1/2 SW-1/4 SE-1/4, Section 17, T. 9 S., R. 41 E., MDM), located along the east side of the Death Valley Road, have been included within public water reserves by the Executive Order's interpretation of Public Water Reserve 107, written on February 1, 1968. There are a number of recorded mining claims in the northwestern portion of the site. This WSA contains 75 percent alluvial fans, 15 percent dissected fans, 4 percent mountains, 3 percent hills, and 3 percent plains.

WILDERNESS QUALITY

Description of Environment

The area is a flat to semi-rolling, southeast-facing moderate slope. Vegetation is predominantly a creosote bush scrub plant community.

Natural Condition

The area generally has retained its primeval character and appears to have been affected primarily by natural forces. The few ways and mining claims are substantially unnoticeable because of the vegetative cover and the rolling and wash topography that screens these few works of man. The boundaries of the Wilderness Study Area are common with the roadless area boundaries.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The area offers outstanding opportunities for solitude because of the primitive character of the landscape, the varied topography and relatively dense bajada-type vegetative cover, and the scenic open vistas of a broad geographical area, including the Last Change Range and Gold Mountain.

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[1] Portions of Ts. 8 and 9 S., Rs. 40 and 41 E., MDM.

Outstanding opportunities for primitive types of recreation are available in this vast largely untouched region.

WILDERNESS STUDY AREA RANKING

This area ranked 137 out of 137.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Part of the $7.9 billion deposit of molybdenum is located in the southeastern Sylvania Mountains at the northern tip of the WSA. Potential for copper, tin, and/or rare earth mineralization is good to high in the granite under the shallow alluvium of this WSA. This area is classified as prospectively valuable for oil and gas by the USGS. The area south of Sand Springs is classified as valuable for sodium by the USGS. Good potential for sand and gravel deposits exists and possibly for clay deposits.

Vegetation

No unusual plant assemblages occur in WSA 118. The vegetation is made up of shadscale scrub and sagebrush scrub. No rare plant species are known to occur within this WSA.

Wildlife

The area consists of flat to slightly rolling terrain. The area is predominately a creosote bush shrub plant community mixed with some shadscale. Little specific information on wildlife resources is available because of lack of surveys. Prairie falcons are known to forage over the area.

Cultural Resources

One area approximately 1-1/2 square miles of known high cultural resource sensitivity is located within the WSA.

Native American Uses, Needs, and Sites

WSAs 118 and 119 occur in an area of contiguous jurisdiction traditionally employed by the Panamint Shoshones and Paiute. Scanty ethnographic data indicate the area was occupied during seasonal rounds of Native American populations collecting basketry material and food.

Scenic Quality

The area has a "medium" scenic quality rating. It received low scores for landform and color and medium scores for vegetation and uniqueness. The visual quality of the area is enhanced by the influence of the adjacent Last Chance Range.

General Recreation

The only known recreation resource in this WSA is the potential interpretive site, Sand Springs. Located in the north end of Death Valley, this spring has been a tourist attraction since the early 1920s.

Range Uses and Potential

The entire WSA falls in the Last Change Allotment, which is grandfathered. This WSA is in the Sand Springs/Last Chance Herd Management Area and concentration area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments received supported the findings.

Study Phase

Of the seven comments received on WSA 118, six favored wilderness designation. Scenic quality was again the most common wilderness quality noted. Protection of air quality, wildlife, and vegetation from motorized vehicles, grazing, and burros was discussed, and primitive recreation was listed.

The comment opposing wilderness designation felt current exploration activity and future mining potential should be given priority consideration.

Three letters in response to the workbook were received, and all favored this area as wilderness.

Draft Plan Alternatives

A public comment, specific to WSA 118, was received in response to the Draft Desert Plan Alternatives; it was in agreement with the Protection Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The North Death Valley Wilderness Study Area (118) is recommended as nonsuitable for wilderness designation. The site includes a portion of a large molybdenum deposit and also displays potential for copper, tin, and/or rare earth minerals. The USGS has classified the area as prospectively valuable for oil and gas. The entire WSA is located within the Last Chance grazing allotment. These resource values, in addition to the area's low rating and the fact that it did not meet any of the desert-wide wilderness objectives, were primary considerations in the decision.

To protect the prairie falcon foraging area and the identified area of cultural resource sensitivity, the site was recommended for Class L designation.

IMPACT OF PROPOSED PLAN

The Class L designation would protect most of the identified wilderness values. Due to the rolling terrain, some loss of quality would result if grazing and mining activities are not properly mitigated. The naturalness of the site and surrounding areas could be reduced by ORV use on designated roads. The small extreme northern portion carries a Class M designation due to a number of recorded mining claims which have already degraded wilderness characteristics in that area.

WILDERNESS STUDY AREA 119

Little Sand Spring

GENERAL DESCRIPTION

The study area (33,550 acres)[1] is bounded on the northwest by a ranch road beginning at Death Valley Road and Little Sand Springs, then northeast to the California-Nevada State border, then southeast along the border to the northeast corner of Death Valley National Monument, then west along the northern boundary of the monument, and then northwesterly along Death Valley Road to the point of beginning. The terrain is rolling to rough and mountainous throughout, with the major portion being the latter. The elevation varies from 2,600 feet near the southwestern corner to 5,363 feet in the extreme southeast. This area is predominantly public land with approximately 2 percent non-public land. This WSA contains 45 percent mountains, 20 percent highly dissected fans, 20 percent alluvial fans, and 15 percent dissected fans.

WILDERNESS QUALITY

Description of Environment

This area contains the western foothills portion of the Gold Mountain Range, which extends from Nevada into California. A low, rolling bajada fans eastward from the foothills to Death Valley, where two springs are located: Big Sand Springs and Little Sand Springs. The foothills generally appear rounded, with many canyons that gradually slope southwesterly onto a bajada, which is relatively flat and has numerous washes that drain into the sands of Death Valley. Vegetation is primarily a mixed desert shrub community with creosote, various cacti, and other species. The foothill area is rather sparse in vegetative cover. The bajada and valley contain lush springs which support marsh-type vegetation and several trees.

Natural Condition

This area has retained its primeval character and generally appears to have been affected primarily by natural forces, with man's imprint substantially unnoticeable. The few ways and two developed springs within the area are substantially unnoticeable due to the topographic variation and the vegetative cover which substantially screen the developments. However, near Little Sand Springs, the presence of numerous burros noticeably degrades the area by reducing vegetative cover and fouling the water source.

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[1]Portions of Ts. 8, 9 and 10 S., Rs. 41, 42 and 43 E., MDM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The large size and extensive topographical variation of the bajada and foothills provide many secluded canyons and washes where outstanding opportunities for solitude can be found. The vast vistas of Death Valley and surrounding mountains provide unique views where man's work is substantially unnoticeable. The terrain variations also provide excellent opportunities for a primitive or unconfined type of recreation.

WILDERNESS STUDY AREA RANKING

The area was ranked 24 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Potentially favorable lithologies occur in the Grapevine Mountains for deposits of perlite, limestone, dolomite, borates, and barite.

Gramma-ray uranium and thorium anomalies (from airborne survey) occur throughout the volcanic and alluvial areas of the WSA. Potential for occurrences occurs in the areas of these anomalies.

The alluvial portion of this WSA has been delineated by USGS as prospectively valuable for oil and gas. Also, portions of the Last Chance overthrust belt occur in the northern Grapevine Mountains. This area also has potential for petroleum deposits.

The USGS has classified a small portion in the southwest corner of this WSA as prospectively valuable for sodium and potassium. USGS drilling discovered lithium in the playa near Death Valley; the lithium may occur as a component of clays.

Sand and gravel occur in the alluvium and in the Quaternary and Tertiary age continental deposits on the northern flanks of the Grapevine Mountains. Pumice, pumicite, cinders, stone, and clay may occur in the Grapevine Mountains on the eastern side of the WSA.

Vegetation

One rare plant occurs within WSA 119, Astragalus lentiginosus var. sesquimetralis. The plant is currently under severe stress from the depredations of feral burros. Its only known location in California is at Big Sand Springs. Alledgedly, 50 percent of the population has been destroyed by feral burros. Although circumstantial evidence links burros to this decline, no cause-and-effect relationship has yet been established.

No unusual plant assemblages occur in WSA 119. The vegetation is made up of the component species of shadscale scrub and sagebrush scrubs.

Wildlife

Little is known about specific wildlife resources present because of lack of analysis of data. Prairie falcons are known to forage within the area.

Cultural Resources

Two areas of known cultural resource sensitivity are located within the WSA.

Native American Uses, Needs, and Sites

WSAs 118 and 119 are in an area concurrently employed by the Panamint Shoshone and Paiute. Ethnographic data indicate that the area was seasonally occupied by Native American populations collecting materials for basketry and food. Specific information should be elicited from the Bishop area Paiute and Furnace Creek Panamint Shoshone and coordinated with management plans.

Scenic Quality

Over-all scenic quality of the area is "medium." The Grapevine Mountains, which dominate the scenery, received medium ratings for landform, color, and uniqueness and a low rating for vegetation. The mountains are relatively free from intrusions.

General Recreation

There are no known recreation resource values in this WSA.

Range Uses and Potential

The southern portion of the Last Chance Allotment falls in this WSA. The allotment is grandfathered. The area is also in the Sand Springs/Last Chance burro concentration area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments which addressed inventory criteria supported the findings. Some comments challenged the interpretation of roads and suggested that borders be deleted to combine numbered areas.

Study Phase

Eleven of the 13 study comments received for WSA 119 favored wilderness designation.

Scenic quality and protection of wildlife and vegetation from cattle and burros in the bajada area were common concerns. Cactus and birds were specific flora and fauna listed as valuable wilderness resources in the area. Removal or management of burros was commonly discussed. Air quality and historic values were mentioned. Hiking was one form of primitive recreation specified, although other general comments on primitive recreation were received. Contiguity with Death Valley National Monument and Imperial National Forest were seen as assets to wilderness management of this area. Combined management with bordering Nevada wilderness was proposed.

The two comments opposing wilderness designation mentioned general sites and sounds that detract from wilderness potential and the desire for vehicle access to enjoy rockhounding and camping in the area.

Three letters in response to the workbook were received and all favored wilderness designation because the area adjoins Death Valley National Monument wilderness.

Draft Plan Alternatives

The following range of public comments specific to WSA 119 was received in response to the Draft Desert Plan Alternatives. Some agreed with the Protection Alternative, others thought that the WSA should be recommended as suitable for wilderness in the Balanced and/or Use Alternatives.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Final recommendation as to suitability/nonsuitability is delayed pending the outcome of the Nevada Wilderness Inventory. Wilderness Study Area 119, Little Sand Spring, adjoins Nevada Wilderness Inventory Unit 0354.

IMPACT OF PROPOSED PLAN

Some wilderness qualities could be degraded by Class L designation. Grazing maintained at existing levels would be compatible but if increased could have an adverse impact. Mining, with its restrictions to areas of diverse topography could be accepted with minor loss depending on the size and scope of the operation. Motorized vehicle use along designated routes could reduce the naturalness and opportunities for solitude. The impacts of these activities, if permitted in the low rolling hills, would be greater due to increased visibility.

WILDERNESS STUDY AREA 120

Waucoba Wash

GENERAL DESCRIPTION

Located to the west of the Saline Valley, the area (11,700 acres)[1] shares its western boundary with a RARE II area of Inyo National Forest. Saline Road provides the eastern border, while the southern edge is defined by a mine road extending into the Inyo Mountains to the Blue Monster and Lucky Box Mines.

The terrain of the area varies from flat to rolling along the east and south to rough and mountainous along the whole western front. The elevations vary from 4,600 feet at the southeast corner to 7,600 feet along the northwestern boundary common with the Inyo National Forest.

The area is 98 percent public land and includes only one non-public section. However, it does include nearly two sections of land withdrawn for a public water reserve. Sections 8, 9 and 7, T. 11 S., R. 37 E., MDM, were withdrawn by Executive Order of December 1, 1913, as Public Water Reserve 13. There is also a small withdrawal of 40 acres, by Executive Order of December 19, 1913. All of the public land lying within one quarter of a mile of the springs in Lead Canyon have been withdrawn as a public water reserve. The latter falls approximately within SE 1/4 NW1/4, Section 8, T. 12 S., R. 37 E., MDM.

In addition, further examination of the records indicates there has been an invasion of the site by the location of a large number of recorded mining claims in the central portion of the site. This WSA is 85 percent mountains and 15 percent dissected alluvial fans.

WILDERNESS QUALITY

Description of Environment

Although primarily mountainous, the area does offer variations. The south and northeast are composed of relatively flat lands and bajadas, dissected by an occasional wash. To the north, the mountains and surface elevation increase. The terrain is highly eroded in many areas and numerous narrow canyons face out over Saline Valley. The variety of plant life changes rapidly with elevation. At the lowest points, vegetation is similar to that found in Saline Valley and is composed primarily of creosote and low desert shrubs. Variety and density increase at the higher elevations. On the

[1]Portions of T.10 S., R. 36 E.; T. 11 S., R. 36 E.; and T. 12 S., Rs. 36 and 37 E., MDM.

crests, pinyon pine, juniper and numerous other species can be found, supported by numerous varieties of low-growing shrubs and annuals.

Natural Condition

The lack of easy access and the rugged, steep terrain have restricted past use, leaving the primeval character intact. The boundaries of the wilderness study area are common with the roadless area boundaries, but exclude the following permanent features: the Waucoba tungsten mine and access road, and access road to a dwelling, and the Bunker Hill mine and access road from the southern boundary of the roadless area.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Typed of Recreation

The adjacent RARE II area, the diversity of surface characteristics (canyons, valley, rolling hills, vertical relief, rock outcrops), and the varying density and height of vegetation insure outstanding opportunities for solitude. The area provides numerous outstanding opportunities for a primitive or unconfined type of recreation.

WILDERNESS STUDY AREA RANKING

This area was ranked 20 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

The WSA includes three past producers. The Waucoba tungsten mine produced a small amount of tungsten in 1939-42. The Bunker Hill mine produced 100,000 pounds of lead. The Blue Monster mine produced over 100,000 pounds of lead and 9,000 pounds of copper from 1908-21 and about $5,000 worth of ore in 1935. Gold and silver values occur at Bunker Hill and Blue Monster. The Lucky Boy mine lies just outside the CDCA but access to it is through the WSA. The Lucky Boy produced a small amount of lead. Fifteen unpatented claims were recorded with BLM as of December 1979. Most of these are in the northern part of the WSA. The Waucoba tungsten and Bunker Hill are covered by active claims. There is no record of claims at the Blue Monster and Lucky Boy.

Geochemical data indicate anomalous values of lead, zinc, and molybdenum. Lead mineralization is known in the area and zinc commonly associates with lead. High molybdenum values indicate additional sampling is warranted to evaluate molybdenum potential.

The areas around known occurrences have high potential for lead, copper, gold, silver, and zinc. The intervening areas have moderate potential for these metals. The entire area has speculative potential for molybdenum. Lead, silver, copper, zinc, and molybdenum are strategic minerals. Sixty-one

percent of the 1978 U.S. gold consumption was imported, partly due to insufficiently developed gold resources in the U.S.

Vegetation

Several desert riparian (cottonwood-willow) areas occur in WSA 120 in the canyons along the east-facing slope of the Inyo Mountains. Besides riparian vegetation with cottonwoods and willows, most of the WSA contains Utah juniper-one leaf pinyon woodland. No rare plants are known to occur within WSA 120.

Wildlife

The area includes steep slopes and deeply cut canyons on the east face of the Inyo Mountains. The variety of plant life changes rapidly with elevation. On the lower bajadas in the eastern edge of the WSA, the vegetation is composed primarily of creosote and low desert shrubs. Variety and density increase with elevation, with pinyon pine and juniper woodlands and probably some limber and bristlecone pines along the western edge at higher elevations. There are numerous springs and intermittent streams with riparian vegetation in the area.

The Inyo slender salamander, a proposed sensitive species and a species qualifying for State rare listings, inhabits at least three canyons within the WSA. This species has only been found at 10 different locations throughout its range and probably has less than 40 acres of riparian habitat in its total range. The Panamint alligator lizard, a rarely observed species and believed to be quite rare, is also found in at least one canyon in the area. Fewer than two dozen have ever been found. Both the Inyo slender salamander and Panamint alligator lizard are relics from millions of years ago when the climate and vegetation were different. The mountainous slopes provide habitat for mule deer and desert bighorn sheep (the herd of 30 is at a critically low level and is located primarily to the south.)

Cultural Resources

Three areas of known cultural resource sensitivity are located within the WSA.

Native American Uses, Needs, and Sites

The WSA includes an area of summer use by Owens Valley area Paiute. A summer campsite is located in the east-central portion of the WSA. The area continues to be employed as a region of traditional hunting activity and domestic collection.

Scenic Quality

The area has "high" scenic quality. The Inyo Mountains, of which this area is a part, received high scores for landform, color, and vegetation and a medium score for uniqueness.

General Recreation

There are good floral displays in the eastern portions of this unit. The Waucoba Marble Canyon intensive use area is located along the eastern boundary of this unit. A total of 346 visitor use days were recorded for this area in 1978. Recreation uses include four-wheel drive and motorcycle touring and access, camping, and sightseeing.

Range Uses and Potential

No grazing allotment falls within this WSA. This area does fall into the Saline Valley burro concentration area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments which address inventory considerations refer to the presence of mining activity and roads penetrating the area which have been accounted for on the current map. Other comments support the natural condition and primitive recreational opportunity findings.

Study Phase

Eight of the 13 study comments received for WSA 120 favored wilderness designation. Scenic quality, geology, and biologic and ecosystem complexity from the Inyo Mountains to the more arid basin and range were factors favoring wilderness designation. Protection of bristlecone pines, the Panamint alligator lizard and the black toad were discussed. Primitive recreation such as hiking and climbing was valued in this area.

Tungsten deposits and hunting were reasons given in the comments opposing wilderness designation.

Two letters in response to the workbook were received, and both favored designation of the area as wilderness, especially since the area is one of three areas that features bristlecone pine. Both letters listed solitude, spectacular natural beauty, and ease of accessibility as features worth saving.

Draft Plan Alternatives

A variety of public comments specific to WSA 120 was received in response to the Draft Desert Alternatives Plan for example, one indicated complete agreement with the Protection Alternative, another expressed agreement with the Use Alternative, while a third insisted that the Inyo Mountains be recommended as suitable for wilderness. Another called for more wilderness than was recommended in the Protection Alternative, and one stated that wilderness would provide protection of the bristlecone pine and bighorn sheep.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 120, Waucoba Wash, is recommended as nonsuitable for wilderness designation.

Most of the area shows some potential for lead, zinc, and molybdenum. The areas around the known occurrences show potential for other minerals. The site has historically supported a number of motorized and nonmotorized recreational activities. A variety of natural and cultural features are present within this WSA. Although the area was rated high (20) relative to the other study areas, it was decided that the competing resource values were of greater significance. The desert-wide wilderness objectives were considered in this decision.

To protect the known cultural and natural resources within the WSA, while providing access for recreation and mineral exploration, the area was recommended for Class L designation.

IMPACT OF PROPOSED PLAN

The entire WSA is recommended for Class L designation. Potential for future mineral development seems high, although mitigation is required. Impacts to wilderness characteristics, particularly naturalness, may be very negative as soils here are highly sensitive and other resources such as wildlife and vegetation are sensitive. Overall, the Class L designation is not sufficiently restrictive to protect the wilderness resource in this WSA.

WILDERNESS STUDY AREA 121

Saline Dunes

GENERAL DESCRIPTION

The area (5,880 acres)[1] is situated in the heart of Saline Valley and defined by three dirt roads. The base of the equilateral-triangle-shaped area is located along the Saline Valley Road, with other sides formed by roads which join a short distance southwest of Lower Warm Springs.

The site is composed entirely of public lands. However, by Bureau of Land Management Order of October 23, 1971, and by interpretation of Public Water Reserve 107, S-1/2-SE, Section 3, and N-1/2-NE-1/4, Section 10, T. 14 S., R. 38 E., MDM, were withdrawn as a public water reserve. This WSA contains 35 percent sand dunes, 35 percent sand-covered plains, and 30 percent plains.

WILDERNESS QUALITY

Description of Environment

The primary topographic feature is sand dunes, covering approximately 50 percent of the area. Land around these dunes is relatively flat and sandy and is fed by streams from both sides of the valley, with the only relief provided by hummocks and shallow washes. Run-off from the Inyo Mountains, plus underground water from the mineral hot springs, provides support for dense vegetative cover which stands out dramatically from the surrounding barren dry lake bottom. Visually, the dominant plant is catclaw in tall, thick stands. Arrowweed, mesquite, and marsh grasses, which have spilled over from the nearby wetlands, are also present.

Natural Condition

The area shows evidence of motorized vehicle use through the dune system. Tracks are visible throughout many areas, but natural forces could rehabilitate the sandy surface. The remains of a few old, uninhabited structures are present and a maintained trailer site is plainly visible. A small water line runs underground, roughly parallel to the southernmost road, with occasional taps readily visible. The naturalness of specific areas is somewhat reduced, but not to the point that the entire site is degraded. The boundaries of the wilderness study area are common with the boundaries of the roadless area.

[1]Portions of Ts. 13 and 14 S., R. 38 E., MDM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The low relief of the area provides little screening; however, the dense stands of catclaw are a prominent feature and do provide some screening and isolation as an island of dense vegetation in the Saline Valley. The area offers outstanding primitive and unconfined recreational opportunities.

WILDERNESS STUDY AREA RANKING

This area is ranked 96 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the DPS industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the BLM computer printout of December 12, 1979, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for geothermal resources and sodium and sand and gravel. Some unpatented claims are recorded.

Vegetation

A small portion (1 square mile) of the Saline Valley mesquite thicket unusual plant assemblage occurs within WSA 121. However most of the WSA is occupied by the Saline Valley Dunes. The vegetation occupying the dunes is not particularly striking but consists primarily of Larrea tridentata, Ambrosia dumosa, Atriplex hymenelytra, A. polycarpa and Prosopis glandulosa, with more typical dune elements such as Dicoria canescens and Oenothera spp. No rare plant species are known to occur within this WSA.

Wildlife

Wilderness Study Area 121 covers approximately 9 square miles of the Saline Valley. The most significant topographic feature of this WSA is the Saline Valley Dune system, located near the northern boundary. The WSA encompasses the northern 80 percent of this dune system. Runoff from the Inyo Mountains provides support for stands of catclaw and mesquite north of the dune system. Predominant vegetation consists of burrobush and desert holly with some stands of creosote and arrowweed. Elevation ranges from 1,100 to 1,200 feet.

Dune systems represent a unique environment of limited occurrence in the California Desert. The differences in substrate texture, vegetation composition, surface temperatures, and evaporation rates on dune systems are

often drastically different than in surrounding environments. Animals on dune systems are often highly specialized and adapted for survival in these sandy areas and may not be represented elsewhere because of isolating mechanisms preventing their spread. Consequently, endemic faunal species of very limited distribution may be present. The Saline Valley Dunes are unique in that they include 100 percent of the range of an endemic scarab beetle (Polyphylla anteronivea) (Andrews, Hardy, and Guiliani, 1979). More endemic species are expected after additional surveys are undertaken. To date, only the beetles have been surveyed in depth.

Cultural Resources

One area, comprising 3.5 square miles of very high sensitivity, is located throughout the eastern half of the WSA in Saline Valley.

Native American Uses, Needs, and Sites

The area included in the WSA has been traditionally employed by the Owens Valley area Pauite/Shoshone. The seasonally occupied area includes campsites and burials of Owens Valley Pauite and some cremations south of the dunes.

Scenic Quality

The study area covers a small portion of a highly scenic area which generally received high ratings in landform, vegetation, color, and uniqueness. The high uniqueness rating resulted, in part, from the presence of the sand dunes which this area encompasses. The visual quality is further enhanced by the influence of the highly scenic adjacent lands.

General Recreation

Good quail hunting, floral displays, and excellent birdwatching are found throughout the WSA. This unit includes all of the Saline Dunes intensive use zone and a portion of another intensive use area. Total visitor use days for these zones was 3,783 in 1978. Primary uses are camping, sightseeing, hiking, backpacking, motorcycle, dunebuggy and four-wheel drive touring and access, and rockhounding. While not currently authorized there are good opportunities for all forms of motorized vehicle free play.

Range Uses and Potential

No allotment falls within this WSA. The WSA is in the Saline Valley Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments supported the findings.

Study Phase

Of the 21 study comments received on WSA 121, 11 favored wilderness designation.

Flora and fauna were most common values discussed. Black toad in Owens Valley and Deep Springs Valley and water sources critical for wildlife were specific protection concerns. The sand dunes were discussed not only in a scenic vein but as an area enjoyed by hikers and science classes.

The comments opposing wilderness designation for WSA 121 were mainly concerned with vehicle recreation that would be denied under wilderness management. Sites and sounds of nearby roads and human activities were seen as detractions from wilderness potential.

It was proposed twice that WSA 121 be combined with 117 since the road dividing these areas is not seen as meeting the BLM road definition.

In response to the workbook, three letters were received in favor of designating WSA 121 as wilderness to preserve the high scenic value and outstanding solitude. One letter mentioned potential dangers of motorized vehicle activity in the area because of the area's remoteness and the possibility of riders not getting out during storms.

Draft Plan Alternatives

The following range of public comments specific to WSA 121 was received in response to the Draft Desert Plan Alternatives. Some agreed with the Protection Alternative, others thought the Balanced Alternative should recommend the Inyo Mountains as suitable for wilderness. It was suggested that wilderness designation would provide protection of bristlecone pine and bighorn sheep. Others thought vehicle access routes should be retained within a wilderness area. It was expressed that the exploration for and development of oil, gas, and geothermal resources were the best uses for the area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Saline Dunes Wilderness Study Area (121) is recommended as nonsuitable for wilderness designation.

Historically, the area has been used for a variety of motorized and nonmotorized recreational activities. The area has limited potential for low temperature geothermal resource development. One area of high cultural sensitivity occurs within the boundaries, and the WSA also represents the entire range of an endemic beetle.

The area was ranked 96, and, considering the desert-wide wilderness objectives and alternate classifications, it was decided to recommend the area for Class L designation. This classification would permit access for

exploration and recreational use while protecting the natural and cultural values present.

IMPACT OF PROPOSED PLAN

The Class L designation in this area would allow vehicle access along designated vehicle routes. If this were implemented and motorized vehicle free play were restricted, the wilderness values may actually be enhanced. There is stated potential for geothermal development as well as some possibility for sodium and sand and gravel. Development of these resources would have negative impacts on wilderness characteristics. Overall, effects of the Class L designation on the wilderness characteristics are minimal depending on the degree of mineral exploitation.

WILDERNESS STUDY AREA 122

Inyo Mountains

GENERAL DESCRIPTION

This long and relatively narrow area (87,945 acres)[1] is located on the western side of Saline Valley between the Saline Valley Road and the Inyo National Forest. Its boundaries are formed by the Saline Valley Road on the east, the Inyo National Forest and California Desert Conservation Area boundary on the west, a dirt mining road to the Lucky Boy mine on the north, and the road over Cerro Gordo Peak through San Lucas Canyon along Lee Flat via the White Mountain Talc Road on the south.

The site is composed of public land except for two non-public parcels totaling 800 acres. However, it should be noted that there are two areas that are withdrawn. By Bureau of Land Management Order of October 23, 1971, and by interpretation of Public Water Reserve 107, the following lands were withdrawn as public water reserves: E1/2-SW1/4, W1/2-SE, Section 25, T. 13 S., R. 37 E., and SW1/4, Section 21; SE1/4-SE1/4, Section 21; S1/2-SW1/4, Section 22; N1/2-NW1/4, SE1/4-NW1/4, NE1/4-SW1/4, N1/2-SE1/4, SE1/4-NE1/4, Section 27.

There are a large number of recorded mining claims throughout the length of the area. This WSA contains 80 percent mountains, 10 percent dissected fans, 5 percent hills, and 5 percent alluvial fans. Most soils in this WSA are highly sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

Starting in the south, the Saline Valley Road drops dramatically through Grapevine Canyon to the floor of the valley. The eastern slope of the Nelson Range rises rapidly. Outside of Grapevine Canyon, the terrain becomes relatively flat, with relief provided primarily by washes and low, rolling hills. Through the Saline Valley and into the Inyo Mountains, the terrain rises and becomes progressively more angular and coarse. The elevation changes from approximately 1,000 feet at the valley floor to nearly 9,000 feet in the north. Although there are localities where plant life is sparse, the vegetative cover is generally more dense and varied than that found in sites with less vertical relief. The lower elevations support creosote, catclaw, annual grasses, and low desert shrubs. Out of the valley floor, Joshua trees become the visually dominant plant, supported by yucca,

[1]Portions of Ts. 12 and 13 S., R. 37 E.; T. 14 S., Rs. 37 and 38 E.; T. 15 S., Rs. 37, 38, 39, and 40 E.; and T. 16 S., Rs. 39 and 40 E., MDM.

cactus, and shrubs. In the higher elevations, dense stands of pinyon pine and juniper are found. Grapevine Canyon is fed by numerous springs on the side of Hunter Mountain. These springs join and form a larger stream which parallels the road between Hunter Mountain and the valley. This water source supports a lush riparian belt composed of both native and introduced shrubs and trees.

Natural Condition

For the most part, the area has remained natural, but some scattered and abandoned mining sites are evident at the base and on the lower slopes of the Inyo Mountains. This portion and an area between Willow Creek and Badwater Spring, which displayed evidence of mining operations and supported human habitation, have been excluded from further wilderness consideration. A road is recognized up McElvoy Canyon. The Snow Flat mine and access roads between Keynot and Beveridge Canyons are excluded. Another small area which reflects past mining activities is located between Hunter and Craig Canyons. Mining claim markers, diggings, and access routes are prominent. Although most of the mining operations appear to be abandoned, the naturalness within these excluded areas has been degraded by them. Lee Flat has also been excluded because of many roads and ways. In terms of the entire area, the visual effect of the impacted areas is minimal. The remainder of the area, which constitutes the majority of the land area, has remained natural and retained its primeval character. The boundaries of the Wilderness Study Area are common with the roadless area boundaries with appropriate exclusions for the permanent facilities mentioned above.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The area provides numerous outstanding opportunities for solitude. Its large size, canyons, valleys, uneven surfaces, and variety of vegetation insure isolation and seclusion. The area's diverse topography also provides a unique setting for activities requiring large spaces and natural challenges as well as outstanding opportunities for a primitive and unconfined type of recreation.

WILDERNESS STUDY AREA RANKING

This area ranked 22 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

This WSA is highly mineralized throughout in talc and in metals. There are five known deposits of talc in the area. Four of these are in the Willow Creek area near the northern end of the WSA. Two of these four have shipped talc recently or ship it intermittently. The fifth talc deposit, the Snowflake mine, produced a small amount of talc. It is located at the eastern edge of the WSA north of Beveridge Canyon. Talc is a strategic

mineral. The Inyo Mountains have historically been an important source of talc.

There are 23 known deposits of metals including gold, silver, copper, and lead. Most of these were past producers. The most notable are the Keynot, which produced $500,000 in gold in the 1870s and 1880s and presently has several million dollars in gold ore in the dumps and veins underground, and the Big Horn, which produced silver, gold, lead, and copper.

Abundant geochemical, geophysical, and field evidence indicate high potential for undiscovered metallic resources throughout the WSA, especially in the area from McElvoy Canyon to Daisy Canyon. The upper part of Hunter Canyon is especially promising because magnetic, gamma-ray, lineament, geochemical, and field data strongly suggest mineralization. Deposits of the mineral pyrrhotite were found in the field in this area. This mineral commonly occurs in environments which might be favorable for cobalt, nickel, or platinum group mineralization. Geochemical evidence suggests Hunter Canyon might be anomalous in cobalt. All of the metals known to occur or speculated to occur here are strategic.

There are approximately 70 claims recorded with BLM as of December 1979. All known talc deposits are covered by claims, as are most metallic deposits. However, the Keynot and Big Horn do not have claims recorded on them. Twenty-two claims have been located in upper Hunter Canyon.

Portions of the WSA are classified prospectively valuable for sodium, and there is a Potential Geothermal Resource Area. High potential for these commodities exists in Saline Valley immediately east of this area, but potential within the WSA is relatively low.

Vegetation

This WSA covers a wide range of vegetation types and includes a number of unusual assemblages. Riparian areas (cottonwood-willow streamside association) are present in many of the canyons along the east slope of the Inyo Mountains as, for example, in upper Hunter Canyon. In the same area, abundant outcroppings of limestone support calciphyte plant assemblages, many of which contain rare limestone endemics. Lastly, the stand of bristlecone pine on the higher reaches of the Inyo Mountains represents the only bristlecone pine forest in the CDCA, outside of the Panamint Mountains in Death Valley National Monument.

The vegetation of WSA 122 is diverse, consisting of sand dune (psammophytic) types, creosote bush scrub, a small amount of shadscale scrub, sagebrush scrub, and Utah juniper-one leaf pinyon woodland, as well as the unusual assemblages discussed above.

Wilderness Study Area 122 is rich in rare plant species. Two of them are limestone endemics found on limestone outcrops at the eastern base of the Inyo Mountains; some have substrate affinities which are largely unknown. Among the rare limestone endemics are: Dedeckera eurekensis, Haplopappus

brickellioides and Caulstraminea (Thelypodium) jaegeri. Others include: Phacelia amabilis, Perityle inyoensis, Astragalus cimae var. sufflatus, Eriogonum microthecum var. panamintense, and E. eremicola.

Wildlife

Wilderness Study Area 122 is located on the eastern slope of the Inyo Mountains, extending from the vicinity of Cerro Gordo Peak north to Paiute Canyon. The elevation changes are dramatic, from approximately 1,100 feet on the Saline Valley floor to 8,800 feet near the crest of the mountain range. Because of the varied topography, a variety of habitat types are represented. Lower elevations are dominated by creosote, burrobush, Joshua trees, and catclaw. Mountain slopes range from pinyon-juniper woodland to limber pine and bristlecone forest near New York Butte. The Inyo Mountains represent an ecotonal area exhibiting both the influence of the more northern Mojave Desert and the mesic environments provided by more northern parts. Virtually all of this unique ecotonal area is located within WSA 122. Canyon systems in the mountains provide habitat for Pleistocene relict populations of several species, including the rare Inyo Mountains slender salamander (seven sites) and Panamint alligator lizard (two sites). This represents 70 percent of the linear areas of occurrence for the Inyo slender salamander. Canyon systems provide water from over 16 springs and associated vegetation used by many bird species, such as the Yellow Warbler (one site), yellow-breasted chat (one site) and gray vireo (one site). The mountain system of this WSA includes one eyrie used by a pair of prairie falcons and approximately 25 square miles used as foraging area by the nesting pair. Approximately 3 square miles of habitat is used by the Panamint chipmunk, which has a restricted range in the northern Mojave Desert. This includes approximately 5 percent of the range of one of three isolated populations.

Approximately 80 percent of the total range of the Inyo Mountains bighorn sheep herd, including 95 percent (14 square miles) of concentration area, 85 percent (70 square miles) of seasonal range, and 60 percent (25 square miles) of transient range, is present here. Over 110 square miles of this habitat also serves as a concentration area for mule deer.

Cultural Resources

Ten areas of known cultural resource sensitivity are located within the WSA. Generally, six archaeological sites per square mile are predicted to occur in valley areas and two archaeological sites per square mile are predicted to occur in mountain areas.

Native American Uses, Needs, and Sites

The use of this area by Owens Valley Paiute and Shoshone conforms to the general pattern described in WSA 120. A Paiute trail runs north-south along the eastern edge of the WSA.

Scenic Quality

The area is of high scenic quality.

General Recreation

This WSA includes several interpretive sites including the Inyo Salt Train which has been rated as good, the historic mining ghost town of Beveridge, and the Keynot Peak Natural Area. There is good hunting and excellent bird watching along the Inyo Mountains/Saline Valley interface.

Range Uses and Potential

A small portion of this WSA enters the Hunter Mountain Allotment. This allotment is grandfathered. Portions of the Saline Valley Herd Management Area and the Hunter Mountain Herd Management Area are in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Specific comments referred to mining activity and access roads which were re-evaluated by field checks and which are shown on the current map where appropriate. Nearly all comments recognized the primitive recreational potential and overall integrity of the geological features.

Study Phase

Of the 42 study comments received on WSA 122, 27 favored wilderness designation. Special concern for the eastern face of the Inyos was shown. Desire was expressed to protect flora and fauna, specifically Panamint alligator lizard, black toad, and pine trees. Qualities of scenery, geology, and history were mentioned. The area's contiguity to Rare II lands and Death Valley National Monument was noted several times as valuable for management and protection of a complete ecological unit. Hiking, camping, and backpacking were other primitive recreational activities suggested for this area. One boundary proposal was made -- to move the western boundary to the foot of the Inyo Mountains so as to exclude active mining and jeep trails.

Several of the study comments opposing wilderness designation mentioned the mining and its activities within the area and nearby. The lack of water and potential mining of lead, zinc, silver, and gold detract from the area's wilderness potential. Grazing desires were among the other concerns listed by those opposing wilderness designation in this area.

In response to the workbook, three letters were received favoring wilderness designation. One letter from the National Park Service (Death Valley) recommended extending the southern boundary of WSA 122 to the road to include the outstanding Joshua tree woodland on the floor of Lee Flat.

Draft Plan Alternatives

A variety of public comments specific to WSA 122 was received in response to the Draft Desert Plan Alternatives. For example, one indicated complete agreement with the Protection Alternative, another expressed agreement with the Use Alternative. Another called for more wilderness to be recommended as suitable than shown in the Protection Alternative. In addition, wilderness was believed to provide some protection of bristlecone pine and bighorn sheep.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 122, Inyo Mountains, is recommended, in part, as suitable for wilderness designation.

The area ranked quite high (22) in terms of relative wilderness values. The area includes 23 known deposits of metals and has been identified by USGS as a potential geothermal resource area.

Recognizing the conflicts in resources, an effort was made to exclude, to the greatest extent possible, the conflicting areas from the area designated for wilderness. It was decided that the central portion of the WSA (roughly 60 percent) would be recommended for wilderness on the basis of its greater value. Roughly 38 percent of the area, in the southeast and north, was recommended as Class L. This category would provide access for continued mineral exploration and development and still protect the natural and cultural resources which were identified during the inventory. The small Class I area in the vicinity of Willow Creek Camp was recommended to accommodate existing and potential mineral activity.

IMPACT OF PROPOSED PLAN

The Class L area includes the southern alluvial slope of Saline Valley and the east face of the Inyo Mountains. Potential for mineral development is extremely high. Resulting development on this alluvial area would be highly visible as would further development on the higher slopes. Much development has already occurred here. Proper mitigation could minimize the adverse effects of future development on wilderness characteristics. A small area of Class I designated lands occurs near Willow Camp where large talc mines are still intermitently active. Further development here would have only localized adverse impacts upon wilderness characteristics of the WSA.

WILDERNESS STUDY AREA 123

Hunter Mountain

GENERAL DESCRIPTION

This area (23,844 acres)[1] is located at the junction of Panamint Valley, Saline Valley, and Death Valley and includes the northern and west-facing slopes of Hunter Mountain. The borders are formed by Death Valley National Monument on the north and east, Saline Valley Road to the west, and the road over Hunter Mountain to the south. The area is composed entirely of public lands, except for a split-land parcel on the northwest border. However, the Bureau of Land Management, by interpretation of Public Water Reserve #107, on February 13, 1974, withdrew as a public water reserve the SE1/4 SE1/4, Section 33, and SW1/4 SW1/4, Section 34, T. 15 S., R. 41 E. (known as Spanish Springs). In addition, Executive Order of December 1, 1w73, withdrew for Public Water Reserve #13 SE1/4 NW1/4, NW1/4 SE1/4, SW1/4 NE1/4, Section 17, T. 16 S., R. 41 E., MDM. This WSA is 80 percent mountains, 17 percent alluvial fans, and 3 percent badlands.

WILDERNESS QUALITY

Description of Environment

Landform varies considerably, from the flat, uniform valley floor adjacent to Saline Valley to the coarse mountain tops adjoining Hunter Mountain. Within these limits, a broad spectrum of terrain types exist: bajada, sheer smooth walls, jagged rock outcrops, highly eroded canyons and valleys, and plateaus. Plant life is as varied as the terrain, with changes related to elevation variation. In the lower areas of Saline Valley, the vegetation is basically creosote and low desert shrubs. Introduced grapes supplement the willow and other native plant life through Grapevine Canyon, which is lush, reflecting the abundance of water. Riparian habitat continues up through the canyon, paralleling the road until it reaches the top of Hunter Mountain where natural springs support a thick stand of pinyon pine and juniper in addition to other plants which abound in the area, including thick stands of sagebrush and annuals. Scenically, the area includes outstanding views of both the Sierra Nevada along the Mt. Whitney Crest and into Death Valley National Monument.

Natural Condition

The area has maintained its natural appearance and the effects of man's works are substantially unnoticeable. Some evidence of cattle grazing exists and some small water tanks, plastic piping, and corral facilities are present. Past small-scale mining activity is also apparent but extremely local in

[1]Portions of T. 15 S., Rs. 40 and 41 E., and T. 16 S., Rs. 40 and 41 E., MDM

nature. The overall impact of these works of man is limited but not degrading to the naturalness of the area. A road to Spanish Spring is maintained from the Hunter Mountain road. The road proceeds along the Death Valley National Monument border beyond the turn to Spanish Spring to mining activity just south of Ulida Flat. With the exception of the Spanish Spring Road, boundaries of the Wilderness Study Area are common with the roadless area boundary.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

An extremely varied topography, supported by an equally diverse vegetative pattern, insures areas of outstanding opportunity for solitude. The area's size, combined with the ability of the terrain and thick vegetative stands to screen visitors, adds to the seclusion. Man's works are not apparent in the area, and there are no conflicting activities which might restrict movement. The diversity of the area lends itself to primitive types of recreation.

WILDERNESS STUDY AREA RANKING.

This area is ranked 2 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

This WSA contains at least 31 BLM-recorded mining claims, and several areas of high potential. In the northern part of the WSA, there are known reserves of wollastonite, used in the ceramic industry to reduce firing time and conserve energy. The geologic environment of the Lippincott lead mine extends into the north part of this WSA. This area, which also has copper, tungsten, and uranium occurrences, has high mineral potential.

In addition, the north-central half of the WSA has occurrences of gold, copper, lead, and tungsten, plus a copper geochemical anomaly. This part of WSA 123 has medium potential for these commodities of which copper, lead, and tungsten are strategic, and gold is excessively imported. The southern part of the WSA has medium potential for copper.

The remainder of non-alluvial parts of the WSA have a potentially favorable environment and speculative potential for copper, possibly gold, lead, and tungsten, as well. The western alluvial area, partly because of its proximity to roads, has speculative potential for saleable commodities, particularly sand and gravel, and may have speculative potential for placer gold.

Vegetation

No unusual plant assemblages are known from this WSA although it apparently borders on a small riparian area located in Grapevine Canyon, along the

northwest periphery. General vegetational components include hopsage scrub, blackbush scrub and possibly some shadscale scrub.

One rare plant species occurs in WSA 123, Mulsea vestitus ssp. inyoensis, a member of the aster family.

Wildlife

The higher elevations of the area support Panamint chipmunk, Panamint kangaroo rat (proposed BLM sensitive species), gray shrew, mule deer, and desert bighorn sheep (proposed BLM sensitive species). The total area used by several species, while small in size, is significant. Eighty percent of the Hunter Mountain bighorn herd's, range which consists entirely of bighorn permanent range, is present here. Area 123 also contains 40 percent of the range of the northernmost of three isolated populations of the Panamint chipmunk. This is a highly critical area for bighorn and for movement between the Inyo and Last Chance herds.

Cultural Resources

Four areas of cultural resource sensitivity are located within this WSA.

Native American Uses, Needs, and Sites

The Hunter Mountain area is one of the most sensitive regions of the California Desert in relation to Native American values. Within the WSA there are extensive areas of ritual use by Owens Valley Paiute, pinyon collection areas, and seasonally occupied village and campsites.

Scenic Quality

The study area rates very highly in overall scenic quality. It received high scores for color, vegetation, and uniqueness, and a medium score for landform. The high uniqueness rating is a result of the visual combination of landform, vegetation, color, and outstandind views to the Saline and Panamint Valleys.

General Recreation

The unit offers good deer and quail hunting in the southern portion and excellent birdwatching in the northern portion. A small portion of the area is within a concentrated use zone which received 469 visitor use days in 1978. Primary uses are sightseeing, motorized vehicle touring, and access, and camping,

Range Uses and POtential

A large portion of this WSA is in the Hunter Mountain Allotment, which is grandfathered. This WSA in parts of Saline Valley and Hunter Mountains Herd Management Areas.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

The road to Spanish Spring and further to Ulida Flat was added as the result of comments received. Other comments support the findings regarding natural condition and opportunities for solitude or a primitive and unconfined type of recreation.

Study Phase

Fourteen of the 24 study comments received on WSA 123 favored wilderness designation. The area's continguity to the Death Valley National Monument, desire for primitive recreation, and control of burros were common arguments in favor of designation. Scenic, ecological, educational, geological, and historical and archaeological values were expressed. Desire to protect riparian habitat, springs, and flora and fauna, specifically the bighorn sheep and Panamint alligator lizard was shown.

The study comments opposing wilderness designation mentioned bordering highways and other sites and sounds that detract from the area's wilderness qualities. Potential mineral production such as uranium and other activities such as grazing and hunting were listed as priority considerations over wilderness qualities.

Two responses to the workbook included one letter recommending establishment of the area as wilderness, compatible with WSAs 117 and 117A and proposed wilderness areas within Death Valley National Monument. The other letter also desired the area to be designated as wilderness.

Draft Plan Alternatives

The following range of public comments, specific to WSA 123, was received in response to the Draft Desert Plan Alternatives. Some agreed with Protection Alternative, another suggested that the size of wilderness in Saline Valley should be reduced, a third wanted the Balanced Alternative to recommend the study area as suitable for wilderness. The need for continuing vehicle access routes into wilderness was mentioned. It was expressed that the exploration for and development of oil, gas, and geothermal resources were the best uses of the area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Approximately 80 percent of Wilderness Study Area 123, Hunter Mountain, is recommended as suitable for wilderness designation. The remaining area, in the western portion is recommended for Class L designation.

The area contains known reserves of wollastonite and has occurrences of other minerals. A large portion of this WSA is located in the Hunter Mountain grazing allotment, which is grandfathered.

Wildlife is abundant and this is a critical area for bighorn sheep and their movement between the Inyo and Last Chance ranges. Four areas of cultural sensitivity are located in the site and, the Hunter Mountain area is one of the most sensitive regions of the California Desert in terms of Native American values. Many recreational activities, motorized and non-motorized, are supported within the WSA. The WSA ranked extremely high (second) in relative wilderness values and joins administratively endorsed wilderness in Death Valley National Monument.

It was determined that, for the most part, the area met the desert-wide wilderness objectives. The Class L designation in the eastern portion would permit limited mining activity on the Saline Valley foothills and still protect the natural and cultural values and scenic quality.

IMPACT OF PROPOSED PLAN

The designation of the Spanish Spring area as Class L would not seriously further degrade wilderness values. Much of the area is already impacted from mining operations and a millsite. Vehicle access in this area may affect solitude and promote random impacts.

WILDERNESS STUDY AREA 124

Cerro Gordo Peak

GENERAL DESCRIPTION

The site is located east of Owens Lake[1]. The western boundary is State Route 138 and a wooden pole utility line right-of-way. The northern border is formed by a road through Lucas Canyon extending over Cerro Gordo Peak to Keeler. The eastern boundary is composed of the White Mountain Talc Road and the Saline Valley Road. The southern Boundary is State Route 190.

The area incorporates one section of non-public land, which accounts for approximately 2 percent of the total. Under the provisions of the Act of Congress of November 9, 1921, Section 27, T. 18 S., R. 39 E., MDM, was established as a materials site for use by the California Department of Transportation.

In addition, large portions of the area have been withdrawn for the protection of the watershed for the benefit of the City of Los Angeles, Department of Power and Water, by Executive Order of July 16, 1913: parts of Sections 27, 18 and 33, all of Sections 33 and 34 and W1/2, Section 35, T. 16 S., R. 38 E.; all of Ts. 17 and 18 S., R. 38 E.; Sections 7, 18, 19, N1/2 and SW 1/4, Section 31, T. 17 S., R. 39 E.; and NW1/4, Section 6, T 18 S., R. 39 E., MDM.

There are a large number of mining claims principally in the western portion and in the area immediately surrounding the Santa Rosa mines near the southeastern edge of the Inyo Mountains.

This WSA contains 40 percent mountains, 40 percent plateaus, 15 percent dissected fans, 3 percent hills, and 2 percent alluvial fans.

WILDERNESS QUALITY

Description of Environment

The area encloses the southern end of the Inyo Mountains, the Santa Rosa Hills, and the Santa Rosa Flats. These combine to provide a multitude of transitional areas and a constantly changing landscape. Generally, the southwestern portons are formed by bajadas which rise to meet the rugged volcanic lava flow known as the Malpais Mesa. The areas at the southern end are flat, rising to low rolling hills and the lava flow. Rugged valleys, deep canyons, sheer mountain sides, meadows, and mesas can all be found within a short distance of each other in the eastern section of the area.

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[1]Portions of T. 16 S., Rs. 38 and 39 E.; T. 17 S., Rs. 38, 39 and 40 E.; and T. 18 S., Rs. 38 and 39 E., MDM.

The transition to the Inyo Mountains is made by gradual landform changes between the Santa Rosa Hills and the Santa Rosa Flats. Plant life is as varied as the landform. On the western side, near Owens Dry Lake, vegetation is extremely sparse. Creosote, supported by low desert shrubs and grasses, dominates the bajada. The transition from desert creosote to mountain pinyon pine and juniper is unique. This change continues over the crest and down the eastern slope, where large stands of Joshua trees provide the transition back to a desert environment.

Natural Condition

The northern section of the roadless area, in the vicinity of Cerro Gordo Peak, has been extensively mined. Shafts, tailings, abandoned mining equipment, and structures, plus a network of ways, lace the area. This activity has so degraded the naturalness of the northern portion that it has been excluded from further consideration for wilderness designation. Approximately 1-1/2 miles south of Keeler, a road leads to mining activity 3 miles inside the roadless area. Approximately 3 miles south of Keeler, another road penetrates to a mining activity site 2 miles within the roadless area. Roads and mining activity sites are also excluded around the White Swan, Viking, and patented Santa Rosa mines. The large exclusion in the north includes the Sunset, Morning Star, and Belmont mines and their accesses. The ruggedness of the mountain terrain tends to localize the impacts of these structures in relation to the entire roadless area, resulting in the presence of a large area which retains its primeval character and is subjected primarily to natural forces. The boundaries of the Wilderness Study Area are common with the roadless area boundaries, excluding the roads and mine areas mentioned, except on the west where the 4,200 foot contour line has been followed to exclude water diversions and debris along State Route 138 to where it crosses State Route 190. The boundaries of the large exclusion at the northern end are along the road to Belmont mine, following jeep trails and canyons to the Morning Star and Sunset mines. These Wilderness Study Area boundaries encompass an area where man's works are substantially unnoticeable.

Outstanding Opportunities for Solitude or a Primitive and Unconfined and Unconfined Type of Recreation

The varied landform and the diverse vegetative patterns provide numerous areas of isolation. The network of spaces generated by mountainsides, rock outcrops, depressions, washes, tall creosote, Joshua trees, pinyon pine, and junipers insures outstanding opportunities for solitude. The area also provides users with outstanding areas where unrestricted movement in all directions is possible.

WILDERNESS STUDY AREA RANKING

This area is ranked 55 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

This WSA is on the fringe of the Cerro Gordo Mining District, the Santa Rosa mine and the Talc City mines; it includes numerous other mines and prospects. The Cerro Gordo District lies on the northern edge of this WSA. Production has amounted to 23,966,020 pounds of zinc, 4,581,937 ounces of silver, and 73,128,860 pounds of lead, all of which are strategic metals. Located south and west of the Cerro Gordo mine, the Morning Star-Estelle mine (located within the WSA) is a significant past producer.

Located about 12 miles northwest of Darwin, the Santa Rosa mine is the eighth largest lead producer in California. Past production amounted to about 12 million pounds of lead, 490,000 pounds of copper, 4,000 pounds of zinc, and 427,000 ounces of silver.

Within 6 miles of Keeler on the west slope of the Inyo Mountains there are three mines and numerous prospects in the WSA. Gold, lead, and silver were produced from the Keeler mine until 1957, and a mill was in operation at the mine until 1944. Southeast of the Keeler mine, the Old Timer mine produced 8,300 pounds of lead and 340 ounces of silver between 1947 and 1948. The Perry Smith mine, northeast of the Keeler mine, produced lead, silver, and zinc ore.

In the Conglomerate Mesa area there are several gold prospects in quartz veins in the shale member of the Owens Valley formation.

The area between Owens Lake and the western margin of the Inyo Mountains is essentially covered with unpatented mining claims. This area, presently being explored for uranium, is part of an area under exploration which extends to Haiwee Reservoir. Some uranium has been produced from the Haiwee Reservoir area. An airborne gamma-ray survey detected uranium anomalies between Owens Lake and the Inyo Mountains, and a stream sediment geochemical sample was high in thorium. Thorium is often associated with uranium. This area has potential for uranium.

The southeastern edge of WSA 124 includes some of the talc mines and deposits of the Talc City area. Exceptionally pure talc has been mined from the Talc City area and is presently mined on an intermittent basis. Talc is also a strategic commodity. East of the WSA in the Talc City area lead, silver, and zinc ore have been produced, and there is potential for these minerals within the WSA.

In the Santa Rosa Hills west of the Saline Valley Road there are five lead-silver-zinc prospects. In addition, there are uranium-thorium anomalies (as detected by an airborne gamma-ray survey).

Based on the numerous occurrences of metallic minerals in this area, the Paleozoic sediments have high potential for lead, silver, zinc, and copper. These areas include the Cerro Gordo Mining District, the western slope of the

Inyo Mountains, and the Santa Rosa mine area. The Santa Rosa Hills have potential for uranium. The Talc City area has potential for talc. Gold is associated with many of the lead-silver deposits and has been produced as a byproduct during the processing of other minerals.

Vegetation

Only a small portion (several square miles) of the Lee flat shadscale scrub assemblage is located within WSA 124. This unusual plant assemblage does, however, extend into Santa Rosa Flats at the eastern periphery of the WSA. The dominant components of the vegetation are shadscale, hopsage, and allscale scrub. Two rare plant species, Caulstraminea jaegeri and Perityle inyoensis, occur within the WSA south of Cerro Gordo Peak.

Wildlife

The changes in slope, elevation, and substrate are also reflected in the vegetative composition, which is quite rich and variable. There are saltbush-shadscale communities with isolated Joshua trees, creosote-burrobush scrub on the desert flats, to pinyon-juniper woodland on mountain slopes along the western boundary of the WSA. The eastern portion of the Santa Rosa Hills also contains a Joshua tree woodland-shadscale community. The southern portion of the Inyo Mountains does not appear to support as diverse a wildlife assemblage as the more northern sections of these mountains. This is probably a reflection of sampling and available survey data; there may be several isolated populations. The somewhat drier aspect of the canyon systems may in part explain this apparent scarcity. A total of 10 square miles of habitat within this WSA contains a mule deer concentration. Approximately 14 square miles is also used as foraging area by a nesting pair of golden eagles.

Cultural Resources

Two areas of cultural resource sensitivity occur within the WSA.

Native American Uses, Needs, and Sites

A regional description of Native American use for this WSA includes seasonal camps and the exploitation of plants and crucial resources. The area has been traditionally occupied in the spring and summer by both Shoshone and Paiute from the southern Owens Valley.

Scenic Quality

This area generally encompasses high-quality scenery. The southern Inyo Mountains, which dominate the scenery, received a high rating for landform and medium ratings for color, vegetation, and uniqueness.

General Recreation

This unit contains no recreation resources.

Range Uses and Potential

Hunter Mountain Allotment is in a portion of this WSA. Also, a portion of the Lee Flat Herd Management Area is in the WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

A large number of comments were general in nature and referred to motorized recreational interests. Those relating to inventory criteria were split between ones which recognized the area for natural values and ones indicating the presence of roads and mining activity. Some very specific comments were received showing exact locations of roads. These were field-checked and nearly all were added to the map.

Study Phase

A minority of the study comments received on WSA 124 (15 out of 40) favored wilderness designation; the scenic, ecological, geological, and biological qualities of the area were mentioned. In particular, rare plants and the black toad were recommended for wilderness protection. Several of these comments recommended conditional closures, that is designation of only "undisturbed" or non-mined sections of WSA 124.

The study comments opposing wilderness designation pointed out that sites and sounds of mining activity and naval weapons center training runs detract from wilderness qualities. Lack of water was also listed as a detraction. Potential of mining for lead, zinc, silver, gold, and geothermal energy were noted. Desire for access for hunting and visiting archaeological sites was discussed.

Four responses to the workbook included two letters in favor of wilderness protection and designation and protection of the desert tortoise. One letter favored maintaining existing use for motorized vehicle and recreational interests. The fourth letter was in favor of permitting geothermal use within the area, since it contains known and potential energy resources.

Draft Plan Alternatives

The following range of public comments specific to WSA 124 was received in response to the Draft Desert Plan Alternatives. One suggested that the Balanced Alternative recommend the study area as suitable for wilderness. Another stated that the exploration for and development of oil, gas, and geothermal resources were the best uses of the area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Cerro Gordo Peak Wilderness Study Area (124) is recommended as nonsuitable for wilderness designation.

Numerous areas within the WSA are known to be past producers of minerals. Exploration is currently being conducted within and around the area, and it has been determined to have a high potential for uranium. Talc is currently being mined adjacent to the WSA.

The area was ranked 55 in relative wilderness values and did not exhibit any of the qualities that were identified as desert-wide wilderness opportunities. The decision for the nonsuitability recommendation was based on the area's mineral potential. It was decided that the value of the mineral resource exceeded the value of the wilderness.

Approximately 85 percent of WSA is recommended for Class M to provide the access for mineral exploration and development. The remaining area, which lies in the vicinity of Conglomorate Mesa, is recommended for Class L. This area contains two rare plant species and an area of very high cultural resource sensitivity/ significance. This designation will protect these important resources.

IMPACT OF PROPOSED PLAN

Class L and Class M would result in impacts which would significantly affect the wilderness values. Although individual activities could result in major impacts, the topography and vegetation would tend to localize the effects. Class M activities surrounding the mountain, on the flat lands would be the most detrimental. In the northern more rugged area, some reduction in impacts would be experienced. Structures and support facilities would, for the most part, be exposed and result in a loss of wilderness value. Vehicle activities, organized or free play, would reduce the naturalness.

WILDERNESS STUDY AREA 127

Panamint Dunes

GENERAL DESCRIPTION

The area (93,220 acres)[1] incorporates the entire northern portion of Panamint Valley and extends into the hills which surround the valley on the north, east, and west sides. Its northeastern limit is Death Valley National Monument and its southern border is State Route 190. A paved road, which runs through the Santa Rosa Hills, forms its western edge. An excellent, graded road extending into Hunter Mountain provides the northern boundary.

Less than four sections of non-public land are scattered within the boundaries and account for less than 3 percent of the total area.

In addition to the above, further search of available data discloses that there has been an invasion of recorded mining claim locations in one section in the west-central portion of the site.

This WSA contains 50 percent mountains, 15 percent plateaus, 10 percent alluvial fans, 10 percent sand-covered plains, 3 percent sand-covered fans, 3 percent dissected fans, 3 percent highly dissected fans, 3 percent playas, and 3 percent sand dunes.

WILDERNESS QUALITY

Description of Environment

Generally, the area can be compared to a saucer. Panamint Valley represents the lower portion and includes a flat, dry lakebed, with only the Lake Hills providing vertical relief. In the northern part, well up on the bajada, a relatively small, but extremely interesting, dune system is developing. To the west, the bright and varied colors of Rainbow Canyon provide an introduction to the unique topography of the outcrops, and rugged mountain canyons, valleys, and peaks are all present. Vegetation is varied from the dry lake bottom, which provies too hostile an environment for most plant life, to the rich, lush pinyon-juniper forests on the highest peaks. Creosote, bunch grasses, desert holy, Joshua trees, plus a large number of annuals are all present and add to the diversity of the site.

[1]Portions of T. 16 S., R. 40 E; T. 17 S., Rs. 40 and 41 E.; T. 18 S., Rs. 41, 42 and 43 E., MDM.

Natural Condition

Except for small portions, where the effects of man's activities are present, the entire area has retained its natural condition and appears to have been acted on solely by natural forces. The Big Four Mine, below Panamint Butte, the Father Crowley Point Monument, the Lee Mines on Lee Flat, and the grazing operations on Hunter Mountain are the only evidence of man. The mines do not appear to be operational, with only local impact. The valley is occasionally used for supersonic flight tests. Signs have been posted to indicate the possibility of sonic booms. The boundaries of the Wilderness Study Area are common with the boundaries of the roadless area with exceptions for the Big Four Mine and access road and portions of the southern Santa Rosa Hills and Lee Flat south of Wilson Ranch.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Typed of Recreation

The over-all diversity of terrain, areas of tall, dense vegetation, and extreme elevation changes ensure numerous outstanding opportunities for solitude. Lack of evidence of man's works ensures unrestricted, outstanding opportunities for recreation.

WILDERNESS STUDY AREA RANKING

This WSA ranked 7 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Lead, silver, zinc, copper, and sand and gravel have been produced from this area. The Big Four Mine, on the east side of Panamint Valley, 7 miles north of State Route 190, has produced 155,872 pounds of lead, 117,200 pounds of zinc, and 1,200 ounces of silver. Prospecting for lead-silver mineralization has taken place on nearby Lake Hill. On the west side of Panamint Valley, on the east slope of the Darwin Plateau, the Whip-poor-will Copper Mine occurs in one of many isolated limestone outcrops in a predominantly basaltic volcanic terrain.

The Lee Mine is located just outside of the WSA about 12 miles north of Darwin. This mine, first worked in the 1870s, produced lead, silver, zinc, gold, and copper ore at least until 1954. It appeared to be active in 1978. On hill 5594 south of the Lee Mine, there are two gold mines, the Wonder and the Inyo Gold. A few hundred feet west of the Lee Mine, the West Vein has also produced gold. About 1 mile north of the Lee Mine is the Silver Reid lead-silver-copper mine.

The California Department of Transportation (CALTRANS) has two sand and gravel sites in the WSA. One is located on the east side of Panamint Valley,

the other is located almost due north of Darwin on the north side of State Route 190.

Based on the numerous occurrences of metallic minerals in this and neighboring areas, the Paleozoic limestone which crops out here has high potential for lead, silver, and copper mineralization. Based on data from geophysical surveys, the Panamint Dunes area and the south slope of Hunter Mountain have potential for uranium. Panamint Lake has potential for uranium, sodium, and potassium and speculative potential for oil and gas. The Panamint Dunes have potential for placer gold and iron.

Vegetation

One unusual plant assemblage is present within WSA 127; the shadscale scrub community occupying Lee Flat. Other than this type of vegetation the WSA includes Psammophytic (Pamamint Dunes), creosote bush scrub, hopsage scrub, allscale scrub, blackbush scrub, and mesquite thicket.

One rare plant species, Astragalus lentiginosus var. micans, is an important constituent of the vegetation of the Panamint Dunes. Other rare species including Eriogonum intrafractum, Enceliopsis covillei, and Sphaeralcea rusbyi var. eremicola occur in Towne Pass at the eastern-most periphery of the WSA.

Wildlife

Wilderness Study Area 127 is located in the northern portion of the Panamint Valley and includes the northwestern section of the Panamint Mountains immediately west of Death Valley National Monument and northern section of the Argus Range south of State Route 190. Elevation ranges from 1,500 feet in the Panamint Valley floor to approximately 6,000 feet in the Panamint Mountains. Dominant valley floor vegetation includes cresosote bush, pleiate coldenia, and locoweed. Mountain slopes support stands of pinyon and juniper.

The Panamint Valley dunes, the only known habitat for two species of very rare arthropods, are located in the north-central portion of the valley floor. Covering approximately 6 square miles, the dune system consists of featureless relatively smooth sand sheets and isolated peaked sand structures known as star dunes which rise to a height of 250 feet above the valley floor. A dry lake bed is located to the southeast and extends to the southern boundary of the WSA. The Panamint Dunes may contain an isolated population of the highly specialized Mojave fringe-toed lizard, confined to sandy habitats much further south.

The mountainous portions contain several important wildlife species. This includes 6 square miles of Panamint chipmunk range, as isolated species of restricted occurrence, confined to three distinct populations. Ten percent of the northernmost of these is present in WSA 127. Mule deer are concentrated over 30 square miles of similar habitat. A variety of raptors, including prairie falcon and golden eagle, is also present here. There are

two prairie falcon eyries used by two nesting pairs of birds and 70 square miles of foraging area. At least one golden eagle eyrie and 40 square miles of foraging area used by a nesting pair of birds are in the northeastern portion.

Desert bighorn sheep are present in the Panamint Mountains framing the eastern boundary, 10 square miles of permanent range, 9 square miles of seasonal range, and 11 square miles of transient range, representing 3 percent of the permanent range, 3 percent of the seasonal range, and 3 percent of the transient range of the herd. The Cottonwood Mountains bighorn herd, numbering approximately 155 sheep, uses the area. The herd has been declining for several years, possibly as the result of competition from livestock and burros.

Cultural Resources

Eight areas of cultural resource sensitivity are located within this WSA.

Native American Uses, Needs, and Sites

This polygon is contiguous with the pattern of use described for Hunter Mountains (WSA 123). Campsites and pinyon collection areas are distributed throughout the northern portion of the WSA. A tentative identification of Paiute burials has been made in the southeastern portion of the polygon. This and pinyon collection also continue to take place throughout the polygon.

Scenic Quality

The overall scenic quality of the study area rates "high." Scores for landform, color, and vegetation were in the high-medium range. The Panamint Dunes represent a relatively unique scenic feature. The entire area is relatively free from the impacts of man.

General Recreation

Rainbow Canyon is a steep-sided colorful area with many panoramas. This is the only interpretive site rated as "high" for its interpretive values. As many as eight interpretive sites in this area are unevaluated. They are: Lake Hill Island, Panamint Butte, Pamamint Valley Dunes, Eichbaum Toll Road, Panamint Overlook, Lee Mines, Father Crowley Point, Darwin Pass area, and Darwin Mining District.

Good deer hunting opportunities exist in portions of this WSA. Good floral display opportunities exist throughout the eastern portion of this WSA. The Panamint Sand Dunes are considered a major sand dune system and have been identified as having interested public concern.

A small concentrated use zone in this WSA received less than 900 visitor use days in 1979. Primary recreational activities in this zone include camping, sightseeing, motorized vehicle play, touring, and access, and shooting.

Range Uses and Potential

A portion of the Hunter Mountain Allotment is in the WSA. The allotment is grandfathered. The WSA contains portions of the Hunter Mountain, Lee Flat, and Towne Pass Herd Management Areas.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Many comments were of a general nature expressing interest in motorized vehicle recreation. Other comments supported the findings regarding natural condition and primitive recreation opportunities.

Study Phase

Twelve of the 33 study comments received on WSA 127 favored wilderness designation. Contiguity to the Death Valley National Monument was the most common favorable comment. Scenic quality was often mentioned along with ecological, historic, and geological qualities. Protection of dunes from destruction by motorized vehicles plus protection of vegetation and wildlife were shown as desirable.

The majority of comments opposed wilderness designation of WSA 127. Sites and sounds detracting from wilderness potential were the most common concern. Mineral potential, specifically lead, zinc, silcer, and gold, was noted. Another common concern was recreation access, the need to use roads and off-road areas in the dunes for recreational enjoyment.

The suggestion was made twice to extend the area's boundary to include adjacent WSAs.

Of the workbook responses received on this WSA, the majority were in favor of wilderness designation and preservation of tortoises. Also mentioned were: extension of the western edge to include the outstanding Joshua tree woodland in Lee Flat; restriction of motorized vehicles; and change in the southern boundary to comply with Wilderness Act requirements, and maintain existing use.

Draft Plan Alternatives

A variety of public comments, specific to WSA 127, was received in response to the Draft Desert Plan Alternatives. For Example, one indicated complete agreement with the Protection Alternative, another expressed that the entire study area should be recommended as suitable for wilderness in the Protection Alternative, while a third insisted that wilderness protection is needed to control damage caused by motorized vehicles. Another stated that the exploration for and development of oil, gas, and geothermal resources were the best uses for the area. In addition, the rationale for decisions was considered as inadequate.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Approximately 80 percent of WSA 127, Panamint Dunes, is recommended as suitable for wilderness designation. The remaining portion is recommended for Class M designation.

Historically the area has been mined for lead, silver, zinc, and copper and the area posseses a high potential for these same minerals in addition to others. The WSA is also an important recreational area with a history of motorized vehicle use (dunebuggy, four-wheel drive, and motorcycle), touring, shooting and camping. The quality of the area for wilderness is evident from its high rating. Ranking seventh and joining Death Valley National Monument, an administratively endorsed wilderness area, were considerations. The area's easy accessibility from paved roads and its diverse terrain which could provide "primitive" challenges to all skill levels were also important factors that supported the desert-wide wilderness objectives. It was determined that the highest use for the majority of the WSA was as wilderness.

The remaining area was recommended for Class M designation to provide access for mineral exploration and development and more intense recreation use. This split designation would protect most cultural and natural values.

IMPACT OF PROPOSED PLAN

Class M designation of the Darwin Plateau would allow activities that, depending upon the degree, could destroy all wilderness and scenic values. The plateau could not absorb the impacts. The range to the east could accept some impacts due to rugged topography, but would require extreme mitigation to keep from significantly impairing the wilderness value.

WILDERNESS STUDY AREA 130

North Coso Range

GENERAL DESCRIPTION

Located north of the Coso Mountain Range, the area's (8,100 acres)[1] northeastern boundary is Highway 190. The northwestern boundary is a powerline right of way and a road. The southeastern boundary is an improved dirt road, and the southwestern boundary is a maintained dirt road used for access to the Sierra Talc mine. Approximately 1 percent of the area is non-public land. The major portion of the area is embraced in a withdrawal for the protection of the Owens Lake watershed for the benefit of the City of Los Angeles, Department of Power and Water, by Executive Order of July 16, 1933. In addition, there are a number of recorded mining claims in the northwestern portion of the area. This WSA contains 40 percent dissected fans, 30 percent alluvial fans, 20 percent hills, and 10 percent mountains.

WILDERNESS QUALITY

Description of Environment

Topography is diverse, with smooth mountains, gentle sloping bajadas, interior valleys, and sheer bluffs. The mountains rise gradually from the bajadas and have smooth ridges and rounded peaks. The bajadas on the north and south drain north toward State Route 190 and east towards the Inyo Mountains. Within the mountains are relatively large interior valleys and small washes, giving the landform a rolling appearance. In the center, numerous bluffs with sheer faces and flat tops add to the diversity. The vegetation is typical, with the dominant plant being creosote bush. Associated with the creosote are other sparse, low-desert shrubs and annual plants.

Natural Condition

Along the western boundary are a few primitive ways, one leading to a favorite informal campsite used by local visitors. None detract from the overall naturalness of the area. However, substantialy noticeable surface-grading scars are located in the northern portion of this roadless area and have been excluded from further wilderness consideration because they significantly alter the natural landscape. A woodpole utility line without a maintenance road parallels the northeastern boundary. The boundaries of the Wilderness Study Area are common with the roadless area boundaries but exclude the far northern corner and the woodpole utility line site.

[1]Portions of T. 17 S., R. 38 E.; and T. 18 S., R. 38 and 39 E., MDM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Because of the area's extreme diversity in terrain and available vegetative screening, outstanding opportunities for solitude exist. Because of the diverse topography and pristine nature of the area, outstanding opportunities for a variety of primitive and unconfined types of recreation also exist. Besides having its own diverse scenery, the area offers beautiful vistas of both the Sierra Nevada to the west and, to the east, Cerro Gordo Peak in the Inyo Mountains.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 134 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Claims include all those that appear on the December 12, 1979, computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM. This WSA has potential for uranium, clay, pumice, cinders, perlite, and sand and gravel. The northwestern end of the area is covered with unpatented mining claims located for uranium.

Vegetation

Vegetation within the WSA consists mostly of allscale scrub, creosote bush scrub, and the Sarcobatus vermiculatus community, an unusual plant assemblage, adjacent to the south shore of the Owens Dry Lake. No rare plant species are known to occur within this WSA.

Wildlife

There are no known federally or State-listed wildlife species, sensitive species, significant species, or unique habitats within the WSA. However, there have been no wildlife surveys here. Vegetation is dominated by a creosote bush community, ranging from 5,200 to 6,000 feet elevation. The lack of records probably reflects a lack of intensive searching effort. Important species may be observed at a later date.

Cultural Resources

One area of high cultural resource sensitivity, comprising 1 square mile, is located in the WSA.

Native American Uses, Needs, and Sites

The entire WSA has been traditionally employed by the Lone Pine area Shoshone for seasonal summer use. Identified permanent occupation sites are located along the northwestern border of the WSA. A similar pattern of use has also been identified for adjacent areas in WSAs 124 and 131.

Scenic Quality

Overall, the scenic quality of the study area is "medium." The area encompasses portions of three scenic quality polyons spanning the range from low to high scenic quality. The diverse vegetation in Lower Centennial Valley represents the unique scenic feature in the area. The mountainous area, which is small in size, represents the only topographical diversity within the unit.

General Recreation

While much of this unit is currently in a designated motorized vehicle free-play area, recreation use in this area has historically been low. The concentrated-use core, which includes the staging area for this motorized vehicle free-play area, has an annual average of 3,146 visitor use days.

Range Uses and Potential

This WSA is in the Lacy/Cactus/McCloud Allotment. The allotment is grandfathered. There are no herd management areas in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Some comments referred to motorized recreational interests in the area. Others challenged the classification of the road along the southwestern boundary. Further field examination supported the findings.

Study Phase

Twenty-four of the 31 study comments received on WSA 130 opposed wilderness designation. Recreational enjoyment -- motorized vehicles, motorbikes, bike racing, and hunting were very common concerns of opposition comments. The fact that the ICMP designated the area as open was mentioned. Sights and sounds and mineral and geothermal potential were other concerns. One commenter felt private land in the area had not been properly mapped and considered.

The study comments favoring wilderness designation addressed the need for protection of air quality, wildlife (black toad), and vegetation (Joshua trees on mountain tops). Values of primitive recreation and historic study were also mentioned.

Three letters were received in response to the workbook. Two expressed support of wilderness preservation and designation. The owner of a private farm agreed with wilderness designation.

One letter expressed the desire for use of the potential geothermal energy resource.

Draft Plan Alternatives

No public comments specific to WSA 130 were received in response to the Draft Desert Plan Alternatives.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The North Coso Range Wilderness Study Area (130) is recommended as nonsuitable for wilderness designation.

The WSA rated very low (134) and did not possess any additional qualities identified as desert wilderness opportunities. This area has identified potential for many minerals, and it includes a large number of unpatented claims. It has been managed as an open area and, in terms of general recreation, this is its primary use. The area also supports a grazing allotment. It was determined that the value of the competing resources outweighed the wilderness value and that the highest and best use of the area would be one that allowed access for mineral exploitation, motorized vehicle oriented recreation, and support of range facilities.

The area is recommended for Class M designation. This would provide a degree of protection while providing the required access.

IMPACT OF PROPOSED PLAN

The Class M designation for this WSA would adversely impact wilderness characteristics. Opportunity for mineral development would permanently impact naturalness. Over-all impacts from this Class M designation would be negative.

WILDERNESS STUDY AREA 131

Coso Range

GENERAL DESCRIPTION

The area (21,550 acres)[1] is located southeast of Owens Lake. Its northwestern border lies approximately 1 1/2 miles southeast of State Route 190 and the powerline right of way along the lower slopes of the Coso Range. This border runs southwest to the south-central portion of Section 30, T. 18 S., R. 38 E., then southeast for 3 miles, then south to Vermillion Canyon, then southeast to the northern boundary of the China Lake Naval Weapons Center for 3 1/2 miles. The eastern and northeastern borders are the beginning of the steep slopes along the eastern foothills of the Coso Range. The latter leads northwest to a maintained dirt mining road leading to the Sierra Talc mine.

The area is primarily public lands, with approximately 5 percent non-public land. A major portion of the area is withdrawn for the protection of the Owens Lake watershed for the benefit of the City of Los Angeles, Department of Power and Water, by Executive Order of July 16, 1933. There are a number of recorded mining claims in the northern portion of the site. This WSA is 70 percent mountains, 20 percent highly dissected fans, and 10 percent dissected fans.

WILDERNESS QUALITY

Description of Environment

This area includes the northern section of the Coso Mountain Range, associated bajadas, and Joshua Flat. The mountains are rugged, displaying volcanic activities and extensive erosion, with numerous interior valleys and washes. A gently sloping bajada, leading toward Owens Lake, is interlaced with washes. Cactus Flat is an interior valley in the Coso Range, with high scenic quality. Joshua Flat, another interior valley, is surrounded by mountains which rise more gently. Lower Centennial Flat is a bajada interlaced with numerous washes which give it a hilly appearance. The vegetation of the area changes as the elevation changes. In the lower bajadas where the soil is sandy, the vegetation is very sparse. Farther up the bajadas are scattered creosote, low desert shrubs, and annual plants. Joshua Flat has large stands of Joshua trees and cactus such as pencil cholla.

[1]Portions of T. 18 S., R. 38 E.; and T. 19 S., Rs. 38 and 39 E., MDM.

Natural Condition

The Cactus Flat area and associated bajada have been mined extensively in the past. There are numerous bulldozing scars, many shafts, and large slag piles. Each mine has a minimum of one access road, which also detracts from the naturalness of the area. Because of these permanent structures, this portion has been excluded from further wilderness study. Other portions that have been excluded are: (1) the Olancha Sand Dune area, which is covered with improved roads and ways and no longer appears undisturbed by man; (2) Lower Centennial Flat, which has scars left by mining and numerous roads and ways running throughout the flat, all easily noticeable; (3) the area southwest of the town of Darwin, because of evidence of both past and present mining activity, extensive bulldozing, and heavy equipment; and (4) the area surrounding and including McCloud Flat, because of evidence of extensive mining activity in the form of roads, ways, large slag piles, and abandoned shafts. The remaining portion of this area, which contains the Cosos Mountains and Joshua Flat, with volcanic mesas and varied topographic features, meets wilderness criteria. There are a few ways on the bajadas, but they do not substantially detract from the naturalness.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Because of the area's diverse terrain, bajadas, rugged mountains, and interior valleys, outstanding opportunities for solitude exist. The vastness of the large flats, combined with the sourrounding mountans, lends itself to a feeling of solitude. Due to the lack of man's permanent structures and the varied topography, outstanding opportunities for a primitive and unconfined type of recreation exist. Outstanding views of the Sierra and Inyo Mountain Ranges enhance the experience. The area is known for its outstanding volcanic displays, large outcrops of obsidian, and evidence of Paiute Indian habitation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 121 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for uranium, metals, montmorillonite, perlite, pumice, and cinders. The northwest third lies within a large block of 2,309 claims for uranium.

Vegetation

No unusual plant assemblages occur within WSA 131. Vegetation consists mostly of allscale scrub, creosote bush scrub, blackbush scrub, and some shadscale scrub. No rare plant species are known to occur within this WSA.

Wildlife

The northern section of the Coso Range represents transient range occasionaly used by scattered desert bighorn sheep. Bighorn transient range is found over 36 square miles of the WSA; this is approximately 7 percent of the transient sheep range present in these mountains. Mule deer concentration areas are located in 22 square miles. The lack of established bighorn sheep populations may be because of the relative scarcity of water, coupled with competition for available resources with livestock, wild horses, and burros.

Cultural Resources

Five areas of cultural resource sensitivity occur within the WSA.

Native American Uses, Needs, and Sites

The general area included within the WSA has been traditionally used by southern Owens Valley area Shoshone and Kitemench. Little specific data are available for the WSA.

Scenic Quality

This area has a scenic quality rating of "medium." It received moderate scores for all of the key factors: landform, color, vegetation, and uniqueness.

General Recreation

This area contains the Vermillion Canyon paleontological site, which has good potential as an interpretive site. While much of the WSA is currently in a designated motorized vehicle free-play area, recreation use in this area has historically been low. There were 3,146 visitor use days recorded in 1978.

Range Uses and Potential

This WSA is in the Lacey/Cactus/McCloud Allotment. The allotment is grandfathered. The WSA takes in portions of the Coso Basin and Centennial Valley Herd Management Areas.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

A large number of comments was received indicating motorized vehicle recreational interest. Other comments, which were directed at inventory considerations, argued the presence or absence of natural conditions in those portions of the roadless area not identified as possessing wilderness characteristics, but no further changes in the findings were appropriate.

Study Phase

Of the 45 study comments addressing WSA 131, 21 favored wilderness designation. Scenic quality and contiguity to the Naval Weapons Training Center were common comments favoring wilderness designation. Lava flows, historical and cultural resources, petroglyphs, and paleontological sites were wilderness values listed for the area. Joshua trees and the black toad were specific flora and fauna listed as needing wilderness protection. Desire to see Cactus and Joshua Flats included in the area was indicated.

The study comments opposing wilderness designation often mentioned two concerns in one letter, both mineral potential and recreational enjoyment, such as hunting and motorbike racing. Contiguity to the Naval Weapons Center was also listed in comments opposing wilderness designation, stating that sights and sounds from the center would detrimentally affect the area's wilderness qualities. Geothermal potential and lack of water were also mentioned.

Eight responses to the workbook were received. Six letters recommended withdrawal from wilderness or boundary changes to exclude the mining area. Geothermal energy development is an important use and should be included. It was also stated that WSA 131 does not meet Interim Management Policy Guidelines for wilderness study areas because of its proximity to the Naval Weapons Center and Edwards Air Force Base and because of drilling and mining activity that have been in process for a great number of years.

Two letters expressed the desire to maintain existing use of this WSA for mining, rockhounding, and motorized vehicle use.

Draft Plan Alternatives

No public comments specific to WSA 131 were received in response to the Draft Desert Plan Alternatives.

SUMMARY OF RATIONALE FOR PROPOSED PLAN

The Coso Range Wilderness Study Area (131) is recommended as nonsuitable for wilderness designation.

The area ranked low (121) in terms of relative wilderness values and did not exhibit any of the qualities identified as desert-wide wilderness opportunities.

The study area has identified potential for uranium and possible potential for metals and other minerals. A large block of uranium claims is located in the northwestern portion. The area is currently managed as a motorized vehicle free-play area, and, in relation to recreation, motorized vehicle use is the primary activity. The site also supports a portion of a grazing allotment.

Based on the resource data, it was determined that the mineral and recreation values exceeded the wilderness values and that the highest and best use of the area would be one that permitted access to support these activities.

The study area includes transient bighorn range and mule deer concentrations. Five cultural resource sites, classified as sensitive/significant, and areas of Native American interest are located here. It is recommended that the southern portion (roughly 75%) be designated as Class L to ensure the protection necessary to maintain the natural and cultural resources. The northern part is recommended for Class M designation to provide for increased mineral exploration and development. This classification would also permit motorized vehicle oriented activities.

IMPACT OF PROPOSED PLAN

Portions of the WSA are recommended for Classes M and L. Vehicle travel on identified routes in Class M will adversely impact natural conditions and therefore degrade the wilderness values of the area. Travel along designated routes in the Class L portion may be less than present levels of use.

WILDERNESS STUDY AREA 132

Great Falls Basin

GENERAL DESCRIPTION

The small 9 1/2-section area (6,150 acres)[1] contains the Great Falls Basin in the Argus Range. It is bordered on the west by the U.S. Naval Weapons Center; on the north by the north edge of Sections 1 and 2 of T. 24 S., R. 42 E.,; on the east by the eastern edges of Sections 1 and 12, T. 24 S., R. 42 E., the northern and eastern edges of Section 18 and a line running from the northeastern corner to the southwestern corner of Section 19, both in T. 24 S., R. 43 S.; and on the south by the southern edge of Sections 23 and 24, T. 24 S., R. 42 E., MDM.

There are several old water pipeline rights of way running across the bottom of Sections 11 and 12. The site is approximately 7 percent non-public land. This WSA is 85 percent mountains and 15 percent fans.

WILDERNESS QUALITY

Description of Environment

The area's diverse topography includes the southern Argus Mountains and associated bajada. The Argus Mountains are a rugged range having jagged ridges, sharp peaks, and deep, sheer-faced canyons. The mountains reach an elevation of over 4,500 feet, some 3,000 feet above the valley. The range appears striated because of ancient sedimentation and has a variety of colors, from reds to brown to oranges to golds. The associated bajada gently slopes to the east and is interlaced with numerous washes, giving it a hilly appearance. The vegetation is mixed desert scrub, with the dominant plant being creosote. There are also numerous annual plants. In the high elevations, the vegetation is sparse to nonexistent.

Natural Condition

Many parts of this area show signs of man's presence: (1) the area surrounding and including Homewood Canyon is scattered with scars from current mining and private homes, interlaced with numerous roads and ways leading to both current and abandoned mines; (2) a maintained road leading into Rattlesnake Canyon is graded and easily seen; (3) the zone between the base of the Argus Mountains and the eastern boundary south of Rattlesnake Canyon to Trona is laced with roads and ways leading to abandoned mines--it displays extensive bulldozing scars and contains a water pipeline and

[1]Sections 1, 2, 11-14, 23, and 24, T. 24 S., R. 42 E.; and Section 18 and NW 1/2 Section 19, T. 24 S., R. 43 E., MDM.

improved access road; (4) the zone surrounding the town of Trona includes the chemical plant and the railroad; (5) the area south of Trona, with signs of extensive motorized vehicle use, shows some permanent scars and is laced with powerlines. Although the remaining section of the area has retained some of its primeval character, it is scattered with an abundance of non-public lands that equal about half of the entire area.

The small 9 1/2-section area possessing wilderness values contains the Great Falls Basin in the Argus Range. This small area is affected primarily by natural forces with man's imprint substantially unnoticeable. A way crosses the extreme northwestern corner of the area, to a spring. Some old and unmaintained spring developments exist, in the form of pipes and small cement boxes, in the Great Falls Basin and Indian Joe Canyon. They have an insignificant effect upon the area. Since the area is extremely steep and rugged, motorized vehicle scars are nonexistent. Approximately 10 percent of this natural area is non-public land.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type Recreation

Outstanding opportunities for solitude are found within the roadless area. The canyons and washes within the southern Avawatz Mountains provide topographic screening and separation into enclosed spaces. Outside of the mountains, large areas are visible from the bajada including the Soda Mountains and the Avawatz Mountains. The unbroken view of these large features provides a psychological feeling of vastness and outstanding opportunities for solitude. The diversity of terrain within the area provides outstanding opportunities for a variety of forms of primitive recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 80 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

The two geochemical samples taken in this WSA were anomalously high in niobium and cerium and showed significantly high values of tin, lanthanum, ytterbium, manganese, beryllium, and zirconium. Tin and manganese are strategic materials (more than 80% of both were imported), and others are valuable exports. The area has no known mineral deposits. However, geochemical evidence indicates a speculative mineral potential.

Vegetation

No unusual plant assemblages occur within WSA 132. Vegetation consists mostly of allscale, creosote bush, and hopsage scrub.

Wildlife

Wilderness Study Area 132 is located on the eastern slope of the Argus Mountains, adjacent to the China Lake Naval Weapons Center. The terrain is rugged and comprised of sharp peaks, large boulders, and an elevated rocky basin. Elevation ranges from 1,700 feet on the Panamint Valley floor to 4,500 feet adjacent to the Naval Weapons Center boundary. Dominant vegetation consists of creosote bush scrub. Water in the Great Falls Basin drainage, including at least seven springs, supports a lush vegetation of willows and cottonwoods, much different from surrounding habitats. Riparian vegetation in the Argus Mountains provides the only habitat for the Inyo brown towhee, a Pleistocene relict population numbering between 72 and 138 individuals. Inyo brown towhee have been reported from the upper end of Homewood Canyon, Great Falls Basin, and Indian Joe Spring. Sixty percent of the entire range of this species on BLM lands is confined to this area. The Inyo brown towhee is being proposed for both Federal and State endangered species status.

This entire WSA lies within the seasonal range of the Argus Mountains desert bighorn sheep herd. Estimated at 12 individuals in the early 1970s and believed to be declining, the Argus Range herd has been reduced to such an extent that unless special management attention is applied, it may be extirpated. Approximately 5 percent of the seasonal range and 3 percent of the total range of the herd is present within WSA 132.

At least one prairie falcon eyrie is located in the Argus Mountains within this WSA. This also includes approximately 11 square miles of foraging area used by this pair of raptors. There is also a series of nest sites for turkey vultures within the Great Falls Basin.

Darwin Tiemann, a well-known naturalist, reported finding a salamander here in the 1950s or 1960s. It could be a new species.

Cultural Resources

Two areas of cultural resource sensitivity are located within the WSA.

Native American Uses, Needs, and Sites

While little specific data are available, the region generally encompasses Panamint-Shoshone occupation and collection areas.

Scenic Quality

The study area has an overall scenic quality rating of "high." Dominated by Great Falls Basin, the area received moderate to high scores for landform, color, and uniqueness. However, it received a low rating for vegetation. The unique feature in this area is the presence of water, although it is not a dominant landscape element.

General Recreation

There are good floral displays throughout most of the unit. The WSA includes a portion of the Great Falls Basin intensive use zone. Primary uses in this use zone are motorcycle and four-wheel drive touring and access, shooting, hunting, and nature-oriented uses. The area was designated as a primitive area in the El Paso Management Framework Plan.

Range Uses and Potential

This WSA contains no allotments. This WSA is in the Trona Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Many of the comments addressing the inventory indicated the presence of man's work in the area. Many other comments stated that portions of the area had wilderness values. A recheck of the area identified a portion of the area meeting 2(c) criteria. Other comments received dealt with study phase issues.

Study Phase

Nine of the 32 study comments received on WSA 132 opposed wilderness designation. Mineral potentials and the desire for hunting and motorized vehicle use were common comments opposing wilderness. The fear that government has already taken over too much land from private use, plus a desire to see recreational development in area, were also shown.

The study comments supporting wilderness designation for WSA 132 noted scenic qualities and the need to protect wildlife and plants from motorized vehicles. Exchange of private and public lands, where applicable, for better management was proposed. Primitive recreation such as hiking was shown as desirable. Flora and fauna, historic springs, and education were wilderness qualities listed for WSA 132. Desire to include Darwin Falls and lands near the Naval Weapons Center in the wilderness designation was shown.

Two letters were received in response to the workbook. Both agreed with wilderness preservation, but one stated that designating 520 acres comprising the entire length of Indian Joe Canyon as wilderness is unnecessary because it will never be disturbed by man.

Draft Plan Alternatives

The following range of public comments specific to WSA 132 was received in response to the Draft Desert Plan Alternatives. One was in complete support of the Use Alternative. A second favored a greater acreage than was recommended as suitable for wilderness in the Protection Alternative.

SUMMARY OF RATIONALE FOR PROPOSED PLAN

The Great Falls Basin Wilderness Study Area (132) is recommended as nonsuitable for wilderness designation.

The study area rated in the lower half of the WSAs and did not include any of the qualities identified as desert-wide wilderness opportunities.

There are no known mineral deposits in the area, but evidence indicates a speculative mineral potential. This is an important area for recreation. Activities such as four-wheel drive and motorcycle touring are popular. The area is also used for hunting, shooting, and nature-oriented recreation.

It was decided that the general recreation values were more significant than the wilderness values and that an alternate classification would provide a better use of the area. The area was recommended for Class L. The WSA includes natural and cultural resources which require protection. It was felt that the Class L designation would adequately protect the resource.

IMPACT OF PROPOSED PLAN

The area is rugged and generally difficult to travel by motorized vehicle. Limited grazing can be accommodated within the WSA. The Class L designation will protect many of the values.

WILDERNESS STUDY AREA 132A

Darwin Falls

GENERAL DESCRIPTION

This WSA will be described in two segments: North and South.

The Argus Range, which dominates both segments of the WSA, forms a long, narrow chain along the west side of the Panamint Valley. The range rises to a maximum of 8,839 feet from a low of 2,200 feet. The foothills are covered with low desert shrubs of creosote scrub plant community. Steeper slopes are relatively free of vegetation, while many of the higher points along the range are covered with pinyon-juniper. Several large canyons penetrate the range from the east.

The western boundary of the north portion (22,400 acres)[1] of the study area is delineated by a line running in a northeasterly direction, beginning at the northern border of the U.S. Naval Weapons Center at China Lake, then along the upper levels of the east sides of both the Darwin Wash and Darwin Canyon to a point within one-half mile of State Route 190, then southeasterly from near Panamint Springs along the lower foothills about the 2,200-foot level to the broad mouth of Osborn Canyon, then up the north side of Osborne Canyon to a point slightly beyond and around Sunrise Mine Road. The eastern border follows this dirt road until an intersection with the mouth of Stone Canyon, and then up Stone Canyon in a westerly and southwesterly direction to about a mile beyond the northeast corner of the U.S. Naval Weapons Center and then west along its northern border to the point of beginning.

This segment is predominantly public land and contains only 1,280 acres of non-public lands. However, several sections within the North and South portions of this WSA have been invaded by the location of mining claims, either patented or unpatented.

In addition, under the Act of Congress on October 26, 1956, there was set apart, for highway purposes, Lot 4, Section 30, T. 18 S., R. 42 E., MDM.

The western border of the south segment (5,760 acres)[2] of this study area lies along the western edges of Sections 31, 30, 19, and nearly at the top of Section 18, then east-southeasterly to a dirt road running south along the eastern edge of the lower foothills of the Argus Range, then to the mouth of Revenue Canyon and up Revenue Canyon to a point common to Sections 32 and 33, T. 20 S., R. 42 E., and Sections 3 and 4, T. 21 S., R. 42 E. (MDM), and then to the point of beginning.

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[1]Portions of T. 18 S., Rs. 41 and 42 E.; and T. 19 S., Rs. 41 and 42 E., MDM.
[2]Portions of T. 20 S., R. 42 E., MDM.

All of the land involved in this portion is public land. However, Sections 27, 28, and 33 have been invaded by mining claims, either patented or unpatented.

In addition to the above, there are three legally authorized rights of way pertaining to water pipelines and plant sites constructed along these. The first falls in the northeast quarter of Section 32 and the south half of Section 28; the other two fall within the south halves of Sections 28 and 27.

This WSA is 50 percent plateaus, 40 percent mountains, and 10 percent alluvial fans.

WILDERNESS QUALITY

Description of Environment

The area includes the southern end of the Darwin Plateau, several deep canyons associated with it, and the Darwin Hills, which are located near the town of Darwin. The Darwin Plateau, which lies generally at 4,000 feet elevation, is cut by deep chasms, exposing volcanic rock faces and providing a variety of exposures and soil types. Spring-fed creeks within the canyons create lush shaded canyon floors. Darwin Falls and China Garden Spring are spectacular areas where falls and shaded pools provide proper growing conditions for a variety of mosses, ferns, and other riparian vegetation. The plateau region is in the northern half with depressions and canyons that cut through the mesa or platea. In the southern half, prominent features above the ground include the Darwin Hills, foothills of the northern end of the Argus Range. The hills themselves and surrounding bajadas support plant associations representative of the Joshua tree woodland and sagebrush scrub communities.

Natural Condition

Man's imprint is substantially noticeable over a large portion of the area, particularly in the southern half. At the extreme southern end is the town of Darwin. Habitations associated with the town extend north along the west side of the Darwin Hills, which are extensively mined throughout their length. Other scattered mining activity with access roads is apparent through much of the southern half of the roadless area. In a portion of the northern half, man's influence upon the primeval character of the land is much less noticeable. Mining activity is nonexistent, and road and way development are minimal. The deep, long canyons in this volcanic area are not impacted by man. The northern half retains its primeval character and comprises the Wilderness Study Area. The boundaries of this area are common with the northern roadless area boundary from its intersection with Darwin Canyon Road to its intersection with Hunter Mountain Road. The eastern boundary is common with the roadless area boundary to China Garden Spring Road. The Wilderness Study Area boundary parallels the north side of China Garden Spring Road and continues northwest across the valley in unsurveyed sections to the northern roadless area boundary.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The deep, quiet canyons which penetrate the southern end of the Darwin Plateau provide isolation from other visitors, thus providing outstanding opportunities for solitude. The unique riparian habitat and winding canyons provide for outstanding opportunities for many types of unconfined and primitive types of recreation.

WILDERNESS STUDY AREA RANKING

This area is ranked 36 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

There are no known metallic mineral occurrences within this WSA. Rock types known to be favorable as a host for metallic mineralization do occur here, however (south and west of the CALTRANS sand and gravel site.) The CALTRANS sand and gravel site is south of State Route 190 about 3 miles east of Panamint Springs.

Vegetation

No unusual plant assemblages occur within WSA 132A. The makeup of the vegetation within the WSA consists mostly of creosote bush, succulent scrub, and, at higher elevations, the components of Utah juniper-one leaf pinyon woodland. No sensititive plant species are known to occur within this WSA.

Wildlife

No Federal or State-listed species have been found here. The entire area is used by a pair of prairie falcons which nest on the western edge of the Darwin Plateau. Riparian vegetation in Darwin Canyon is important to many species of birds, including at least 13 species of warblers. A hybird population of two species of toads (Bufo boreas and B. punctatus) occurs here.

Cultural Resources

One area of high cultural resource sensitivity, comprising .5 square mile is located within this WSA.

Native American Interests

Little specific data are available on the study area although the general description for the region identifies the area as a potential Shoshone occupation and collection area.

Scenic Quality

This area has an overall scenic quality of "high-medium." It includes two scenic quality polygons. The polygon covering the largest area received medium scores for landform, color, and uniqueness and a low rating for vegetation. However, the study area includes Darwin Falls which rated outstanding. The falls and canyon represent a unique scenic feature because of the presence of flowing water and dense, riparian vegetation in a desert region. The visual quality of the study area is enhanced by the scenic Argus Range backdrop.

General Recreation

The area offers good quail and chukar hunting on the eastern tip. It is adjacent to the Darwin Canyon concentrated use zone, a portion of which is motorized vehicle closed area. Primary uses in this zone are hiking, sightseeing, motorized vehicle touring and access, education and research, hobby prospecting, and rockhounding. Total visitor use days for this zone in 1978 were 2,735.

Range Uses and Potential

The WSA is not in an allotment.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments reflected the variety of activities in the area and concurred with the findings.

Study Phase

Nine of 14 study comments addressed to WSA 132A favored wilderness designation. Scenic quality was the most common wilderness quality mentioned. Specifically noted for protection of scenic quality was Darwin Falls. While some comments asked for rehabilitation of mining areas, others requested boundary exclusion of these areas.

The comments opposing wilderness designation dealt mainly with mining potential -- lead, zinc, silver, gold, and tungsten -- and recreational use -- rockhounding and hunting.

One letter written in response to the workbook favored wilderness designation.

Draft Plan Alternatives

The following range of public comments specific to WSA 132A was received in response to the Draft Desert Plan Alternatives. One was in complete support of the Protection Alternative. The second insisted that the entire study

area be recommended as suitable for wilderness under the Balanced Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Darwin Falls Wilderness Study Area (132A) is recommended as nonsuitable for wilderness designation.

The site has no known mineral deposits but analysis of samples indicates potential. Historically, the area has been a favorite recreation site for many activities, including motorized vehicle touring and access, hunting, shooting, and nature-oriented uses.

Considering the desert-wide wilderness objectives, it was decided that the area's value in terms of general recreation was more significant than its wilderness value. The WSA is recommended for Class L designation. This classification would protect the resources and still permit the continuation of recreation activities in a known popular area.

IMPACT OF PROPOSED PLAN

The Proposed Plan recommends Class M and L designations. Due to the limited access to the eastern half of the WSA, the Class L designation here may be sufficient to protect the wilderness values present. The Class M designation over the western half could seriously degrade wilderness values, should any of the speculative mineral potential be exploited. Also, increased ORV use over identified routes may detract from the natural condition in the higher elevations. Overall, inpacts to wilderness values are slightly to moderately negative depending upon the degree of mineral development.

WILDERNESS STUDY AREA 132B

North Argus Range

GENERAL DESCRIPTION

This area containing (21,089 acres)[1] is bounded on the north by State Route 190; on the east, by a combination of dirt maintained roads and the Panamint Valley Road; on the south, by a maintained dirt road in Homewood Canyon; and, on the west, by the U.S. Naval Weapons Center at China Lake.

This area is predominantly public land with five random blocks of non-public land comprising approximately 5 percent of the land area. This WSA contains 70 percent mountains, 15 percent plateaus, 7 percent alluvial fans, 2 percent badlands, 2 percent dissected fans, 2 percent highly dissected fans, and 2 percent hills.

WILDERNESS QUALITY

Description of Environment

The Argus Range, which dominates the area, forms a long, narrow mountain chain along the west side of Panamint Valley. The range rises to a maximum of 8,839 feet. The foothills are covered with low desert shrubs of the creosote scrub plant community. Steeper slopes along the range are relatively free of vegetation, while many higher points along the ridgeline are covered with pinyon-juniper. Several large canyons penetrate the range from the east.

Natural Condition

The eastern side of the Argus Mountain chain is the scene of much development which alters the primeval character of the landscape. This development occurs in the form of mining operations of various sizes and their associated access roads. Scattered mining activity occurs east of Darwin Canyon. In the northern Argus Range, an apparently abandoned mining operation has little impact in Osborne Canyon. Just south of Osborne, in the next three canyons (Stone, Thompson, and Snow Canyons), large-scale mining activity occurs with numerous prospects and smaller sites which reduce the apparent naturalness of these canyons significantly. Just south of Snow Canyon is Panamint Quarry, an active large-scale operation with a paved access road from the south, which is part of the roadless area boundary. Farther south, small mining areas with human habitations affect the primeval character of the land between Bendire Canyon and Shepherd Canyon. More light mining occurs south

[1]Portions of T 19 S., Rs 41 and 42 E.; T 20 S., Rs 41 and 42 E;, MDM.

to the low saddle where the Slate Range joins the Argus Range. Numerous small mines with habitations occur in Orondo Canyon and in Homewood Canyon.

The bajada adjacent to the Argus Range in Searles Valley is laced with maintained and unmaintained access routes which run between canyons and mining operations, dwellings, and water sources, as well as recreation sites. Generally, the naturalness of this bajada has been nullified by these impacts of man's presence. The impacts of much of the mining activity are not screened by their location and have been excluded from wilderness consideration. The northern portions of this large mountainous area appear to have been primarily affected by natural forces with man's imprint substantially unnoticeable.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The complexity of the terrain provides a high degree of screening which tends to isolate visitors and localize the impacts of some features within the area. Particularly in the northern portion of the roadless area where less mining occurs, the combination of vegetative diversity and topographic relief provides outstanding opportunities for solitude and primitive and unconfined types of recreation.

WILDERNESS STUDY AREA RANKING

This area is ranked 79 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Lead, silver, zinc, and gold have been produced from two areas in the northern end of the Agrus Range: Zinc Hill and the Modoc Mining District.

The mines and prospects clustered within similar geological terrane in the Modoc District include the Surprise, Modoc, Minnietta, Defense, Hughes, Eclipse, and Little Mack. Small mines and propects include the Paul Imlay, Little Jim, Olancha Lead No. 1, and Surveyers Lead. Of these mines the Modoc, Minnietta, Hughes, Eclipse, and Little Mack are excluded from the WSA. Production from the district has amounted to about 2,080 ounces of gold, 2,040,000 ounces of silver, 20,200,000 pounds of lead, 217,000 pounds of zinc, and 189,066 pounds of copper.

In the Modoc mine area there is high potential for undiscovered silver-lead deposits. Most mines in this area were discovered during the 1870s. The discovery of the Surprise mine in 1941 in this heavily prospected area suggests that undiscovered subsurface deposits may exist at previously developed or undeveloped sites. The discovery of several thousand tons of ore at the Defense mine by drilling in 1953 leads one to believe that additional ore may be discovered at the Modoc, Minnietta, or other mines which have not been drilled.

Outside of the Modoc Mining District, in the northern Argus Range, Zinc Hill is also an important center of mining. Primary production has come from the Empress and Zinc Hill mines. This production has amounted to approximately 3,500,000 pounds of zinc, 270,000 pounds of lead, 8,500 ounces of silver, and 14,300 pounds of copper. Other lead-silver-zinc mines on Zinc Hill include the Darwin Zinc, Wynog, and Grand View. The Granite gold mine is also on Zinc Hill. On the west slope of Zinc Hill there are at least seven lead-silver-zinc prospects. In Soborne Canyon there are three uranium prospects which occur on the Osborn Canyon fault. There are above-normal levels of radioactivity in the Zinc Hill mine. The Zinc Hill mine, currently under claim, contained minable ore when activity ceased in 1957.

The northern Argus Range has high potential for lead-silver-zinc, gold, tungsten, and uranium, all of which are strategic commodities.

In the portion of the Central Argus Range between Snow Canyon and Revenue Canyon there are numerous prospects and mixed deposits. The Copper King Mine in (SW1/4 Sec. 33, T. 20., R. 42 E.) just outside the southeast edge of the WSA was first mined in the 1870s and has been intermittently mined since the early 1970s. This high-grade copper, lead, silver, zinc property has high potential for further production. Rocks similar to those at this mine crop out north and west of Revenue Canyon inside the WSA.

Due west of the Kerr-McGee Westend Quarry (at the mouth of Revenue Canyon) there is an unnamed canyon from which Kerr-McGee obtains water for the operations at the quarry. There is a pipeline and a graded road up this canyon for a distance of about 2 miles. Water is obtained from two springs (not mapped on the Maturango Peak, 1951, quadrangle). At the mouth of this canyon there are numerous roads and open pits in limestone, probably related to the Kerr-McGee operation.

From the Maturango Peak quadrangle and geologic maps of the area, it was noted that one mile north of the Kerr-McGee quarry there are three adits driven on a fault in quartz monzonite. Between Snow and Wood Canyons there are two prospects or small mines. There are no published data on these mines. North of Snow Canyon gold is actively being mined. Geochemical samples in Snow Canyon are anomalously high in copper, silver, lead, and zinc. No geochemical samples were taken from drainages in the WSA. This area may have potential similar to Snow Canyon.

This WSA has potential for mineralization of gold, copper, silver, lead, and zinc. From geophysical surveys there is also potential for uranium and thorium. Farther south there is high potential for porphyry copper mineralization. Within the WSA there is potential for similar porphyritic mineralization. Copper, silver, lead, zinc, uranium, and thorium are strategic metals.

Vegetation

No unusual plant assemblages occur within WSA 132B. The makeup of the vegetation within the WSA consists mostly of creosote bush, succulent scrub,

and, at higher elevations, the components of Utah juniper-one leaf pinyon woodland. No rare plant species are known to occur within this WSA.

Wildlife

This WSA contains about 17 square miles of permanent bighorn sheep range and 7 square miles of seasonal range. The number of bighorn sheep using these ranges is declining. The Argus Mountains bighorn sheep herd has been estimated at 12 individuals. Approximately 5 percent of the total range of this herd, including 20 percent of the permanent range and 3 percent of the seasonal range, is located within WSA 132B. The southern parcel contains two springs which are important to sheep and other wildlife. At least one golden eagle eyrie and the associated foraging area are included in this WSA. This WSA may have a number of special wildlife values not noted here. Much of the area is essentially unsurveyed.

Cultural Resources

Two areas of very high cultural resource sensitivity occur within the WSA.

Native American Uses, Needs, and Sites

This region has been traditionally employed for summer and spring collection by both Owens Valley Shoshone-Pauite and Furnace Creek area Shoshone. The area running from Lookout Mountain to Maturango Peak is a pinyon collection area of both Pauite and Shoshone. A ritually associated area also lies within the WSA in the Lookout Mountain area. The general area has been employed for both occupation and hunting/collection activities.

Scenic Quality

The over-all scenic quality rating for this area is "high." Scores for each of the key factors (landforms, color, vegetation, and uniqueness) were high-medium. Views of the scenic Panamint Valley enhance the visual quality of the area.

General Recreation

There are good quail and chukar hunting opportunities throughout the WSA.

Range Uses and Potential

The northern part of WSA 132B is in a portion of the Lacy/Cactus/McCloud Allotment. The WSA is in the Darwin Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Several comments noted the presence of mining areas and roads. Portions were excluded from wilderness consideration following further field examinations.

Study Phase

Five of 12 comments addressing WSA 132B favored wilderness designation. Improved management was suggested by keeping WSAs 132, 134, and 132B as one block. Designation of this area would provide time for adequate analysis of potential for rehabilitation and the validity of existing claims, some said.

The comments opposing wilderness designation dealt mainly with mining, its potential and the need for road access sites. Rockhounding for jasper was mentioned, along with other recreational uses.

No workbook responses were received concerning this WSA.

Draft Plan Alternatives

A public comment in agreement with the Protection Alternative's wilderness suitability recommendations for WSA 132B was received in response to the Draft Desert Plan Alternatives.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 132B, North Argus Range, which is divided into two separate areas, is recommended as nonsuitable for wilderness designation.

Mines located in the WSA have historically been large mineral producers and the site is included in a section of the Lacy/Cactus/McCloud grazing allotment. This WSA ranked in the bottom half (79) in relative wilderness values. The nonsuitable recommendation resulted from the determination that the value of the area for mineral development was greater than its value for wilderness and that the area did not satisfy any of the desert-wide wilderness objectives.

The area possesses known natural and cultural resource values that need protection. To accomplish this, the area was recommended for Class L designation.

IMPACT OF PROPOSED PLAN

The area is recommended for Class L. Most activities permitted under this class would result in only localized impacts.

Rugged terrain could absorb all but very large operations with a minimum loss of wilderness values. In the surrounding bajada, with flat land and sparse vegetation, impacts would be greater. Mitigation and proper management would reduce the effects. Off-road vehicle use on designated routes would reduce the naturalness of the area.

WILDERNESS STUDY AREA 134

Wildrose Canyon

GENERAL DESCRIPTION

The northern boundary of this area (38,900 acres)[1] is State Route 190. The western boundary is the Panamint Valley Road, the southern boundary Wildrose Canyon Road, and the eastern boundary Death Valley National Monument. The area is approximately 95 percent public lands with three sections of non-public lands scattered throughout. There are a number of recorded mining claims on the western edge. This WSA contains 25 percent alluvial fans, 15 percent badlands, 15 percent dissected fans, 15 percent highly dissected fans, 10 percent pediments, 5 percent playas, 5 percent plains, 5 percent hills, 3 percent mountains, 1 percent riverwashes, and 1 percent sand-covered plains.

WILDERNESS QUALITY

Description of Environment

Topography is varied. The steep mountains of the northeast are cut by a series of deep canyons from which gently sloping alluvial fans issue to the western edge. The naturally broken and eroded hills of the southeast give the area a "badlands" appearance. The western half consists of low rolling hills. In the northwest portion a small dry lake is present. Vegetation varies with substrata and elevation. The alluvial fans are dominated by a sparse and regular growth of creosote bush and desert holly. Creosote in the washes and canyons is not dense but grows to a greater height. The steep slopes show little or no vegetation. The area is used by bighorn sheep and is extremely scenic in all terrains.

Natural Condition

The area is pristine and remains in an undeveloped primeval character. It is without permanent structures or human habitation and is affected primarily by natural forces. A few primitive ways are located in the area; however, none affect the naturalness of the area. A small mining claim is on the western boundary at Hill 1822. Because of its close proximity to the border and screening by the hill, the claim has little effect on the naturalness of the land.

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[1]Portions of T. 18S., Rs. 42 and 43 E; and T. 19s., Rs. 42 and 43 E.; and T. 20 S., Rs 43 and 44 E., MDM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Outstanding opportunities for solitude are easily obtained in the area. No roads or boundaries are present to encroach upon freedom of movement. The ruggedness of the mountainous terrain, with its deep canyons, serves to screen visitors from one another. In the gullies, visitors are out of sight and sound from one another because of the topography. Solitude can be obtained on the alluvial fans due to large size and slight rolling aspects. The variety of the terrain and over-all gentleness of the slope present many opportunities for primitive and unconfined types of recreation.

WILDERNESS STUDY AREA RANKING

This area is ranked 25 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

In Panamint Lake south of State Route 190 there are clay deposits which were drilled and prospected by pits to determine the suitability for use as drilling mud. They are presently undeveloped. Southeast of Towne Pass, CALTRANS removes sand and gravel for road maintenance.

There is potential for lead-silver-zinc mineralization in the marble and dolomitic rocks on the extreme eastern edge of the WSA. Dolomite, which is used in the chemical, construction, and agricultural industries, is a valuable commodity itself. The lake bed has potential for uranium, zeolites, sodium, and potassium and speculative potential for oil and gas. There is also potential for high metal concentrations in brines such as are found in Searles Lake and Saline Valley.

Vegetation

No unusual plant assemblages occur within WSA 134. The vegetation of this WSA consists of creosote bush scrub, shadscale scrub, mesquite thickets, and desert holly scrub. Two rare plant species (Eriogonum intrafractum and E. hoffmannii ssp. hoffmannii) are present within this WSA.

Wildlife

The area extends from 6,200 feet in the Panamint Mountains down to 1,600 feet in Panamint Valley. Vegetation varies with elevation. The steep slopes have low cover of shrubs. The lower slopes are creosote bush desert scrub. The higher portions of the WSA provide transient range for desert bighorn sheep. The area also contains mule deer concentrations. Prairie falcons forage over the lowland areas in the western two-thirds of the area.

Cultural Resources

Four areas of cultural resource sensitivity are located within the WSA.

Native American Uses, Needs, and Sites

This area of seasonal use has been employed by the Panamint-Shoshone through historic times for chia and blazing star collection. The majority of the area has been employed seasonally as a summer and late spring occupation and collection area.

Scenic Quality

This study area has an over-all scenic quality rating of "medium." Consisting mostly of the Panamint Valley, the area received medium scores for vegetation and uniqueness and low scores for landform and color. However, the small mountainous portion of the area received high-medium scores in landform, color, and uniqueness and a low score in vegetation. Views to the scenic Argus Range and Panamint Mountains enhance the visual quality of the study area.

General Recreation

There is fair deer hunting in the upper elevations of the WSA.

Range Uses and Potential

No allotments fall within this WSA. The WSA does include a portion of Towne Pass Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Most comments received agreed with the findings.

Study Phase

Sixteen of the 22 comments received about WSA 134 favored wilderness designation. The major qualities which make the area suitable for wilderness, according to input, are its contiguity to Death Valley National Monument and its scenic quality. Educational and scientific opportunities such as ecology, geology, and history were common acknowledgments. Primitive recreational activities listed were: primitive camping on the valley floor, good hiking, and horseback riding. Protection of flora and fauna was shown as desirable, specifically for the barrel cactus and endangered Panamint daisy.

The comments opposing wilderness designation discussed activities and scenic quality. One felt the area was ugly and flat, offering no chance for solitude. Another discussed sites and sounds from near the area that would

detrimentally affect wilderness opportunities of the area. A desire for road and way access for rockhounding and photography was noted along with a suggestion to leave Tuber Canyon specifically open to vehicles. Boundary extension to the paved Panamint Valley road was proposed.

Responses received as a result of the workbook, generally supported wilderness and tortoise protection because of high scenic and botanical values of the Panamint Range. One letter proposed moving the northern boundary farther away from State Route 190.

Draft Plan Alternatives

A variety of public comments specific to WSA 134 was received in response to the Draft Desert Plan Alternatives. For example, one indicated complete agreement with the Protection Alternative, another expressed the need for more acreage to be recommended as suitable for wilderness than in the Protection Alternative, while a third insisted that more nonmountainous areas be recommended as suitable for wilderness than in the Balanced Alternative. In addition, protection was requested for the Panamint Valley burros.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Roughly 50 percent of Wilderness Study Area 134, Wildrose Canyon, is recommended as suitable for wilderness designation. Class L designation is recommended for the remaining part.

The study area borders an administratively endorsed wilderness area in Death Valley National Monument. This and the fact that the WSA rated in the top 25 percent of the areas studied were important factors in the decision to recommend part of the area for wilderness. Resource conflicts resulted in the eastern portion, adjoining Death Valley, being recommended for wilderness while the western part is recommended for Class L. It was determined that this compromise was in keeping with the desert-wide wilderness objective. Because of the potential for mineral development and the need to protect the known natural and cultural resources, the western portion, in the Panamint Valley lowlands, is recommended for Class L designation. This will permit access for further mineral exploration and permit limited motorized vehicle use.

IMPACT OF PROPOSED PLAN

The area is divided into three multiple-use classes. The Class C designation for the rugged Panamint Mountain would protect the wilderness and scenic values present. The large, flat bajada is designated as Class L. Mineral development on the bajada could significantly impact both the wilderness values and scenic qualities, although mitigation is required. Lack of vegetation and terrain diversity would make it difficult if not impossible to mitigate the impacts of facilities, structures, etc.

WILDERNESS STUDY AREA 136

Surprise Canyon

GENERAL DESCRIPTION

This area (54,400 acres)[1] is in the Panamint Mountains, bordered on the east and north by Death Valley National Monument and Wildrose Canyon Road, on the west by a county-maintained road, known as Indian Range Road, and on the south by the road running up Pleasant Canyon east from Ballarat.

The area is approximately 95 percent public lands. The non-public lands are in two squares along the western boundary. There are a number of recorded mining claims within the southeastern portion of the area. There is also a withdrawal on the study area. Sections 13 and 14, T. 21 S, R. 44E., Sections 8, 9, 10, 11, 16, and 18, T. 21 S., R. 45 E., MDM, are partially embraced within a public water reserve, a withdrawal made subject to the Bureau of Land Management's interpretation of Public Water Reserve 107. This WSA contains 75 percent mountains, 10 percent alluvial fans, 5 percent dissected fans, 5 percent highly dissected fans, 3 percent riverwash, and 2 percent plains.

Most soils in this WSA are highly sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

Basic topography is rugged mountains and deep canyons. Included in the area are the small, steep alluvial fans which issue forth from the canyons, to the immediate west of the mountains, and a small area of naturally broken hills and "badlands" in the extreme northwestern area. The small, steep fans and the badlands tend to be rocky and grey. The fans have many small washes cutting them, while the hilly areas have small gullies and channels cutting them. Vegetation varies with the substrate and elevation. The badlands and fans have widely spaced creosote bush scrub and desert holly as the dominant plant forms. The canyons have extensive riparian plants such as cottonwoods and willows. At increased elevations are the Great Basin sagebrush and the pinyon pine-juniper belt. Limber pine is encountered on the highest slopes, with Great Basin sagebrush as the chief understory plant. The rock areas at 1,200 to 4,000 feet elevation support the Panamint daisy, which is a rare and endangered plant species. The area contains one of the last remaining refuges for desert bighorn sheep. Also found in this area is an indigenous species of lizard, the Panamint alligator Lizard, as well as an indigenous

[1] Portions of T. 20 S., Rs. 44, 45 and 46 E.; T. 21 S., Rs. 44, 45 and 46 E.; and T. 22 S., Rs. 44, 45, and 46 E., MDM.

sub-species of speckled rattlesnake. The area also contains the Panamint City ruins at the end of Surprise Canyon.

Natural Condition

Maintained roads penetrate this area from the west and follow Jail, Surprise, Happy, and Jackpot Canyons. A maintained road in Jail Canyon winds south from a point one-half mile west of the mine in Jail Canyon to a spring in Hall Canyon. Near the end of Surprise Canyon a road winds north up Sourdough Canyon for about 2-1/2 miles. This road then breaks off to the northwest for another mile to a heavily mined area. Patented mining claims have been excluded from wilderness consideration in the Panamint City area. An additional road heads north off Happy Canyon Road to another heavily mined area. One more road leads north of the end of Jackpot Canyon Road. It winds north, then east to a point about 1 mile north of Clair Camp. Additionally three short roads lead north near the end of Pleasant Canyon. The easternmost of these roads is up Mormon Gulch. Finally, a road runs about 1.5 miles to the AB Mine in the extreme northwest corner of the area. Roads in canyons and the badlands area have little or no effect on the naturalness of the surrounding areas because of the topographic screening. The walls of these canyons tower several hundred feet from the canyon floors, rendering road and mining scars substantially unnoticeable. These overall effects on even immediately adjacent areas are negligible. At the mouth of Hall Canyon is a small Indian reservation known as the Indian Ranch Reservation which has no effect on the naturalness of the area but has been excluded because it is not public land. The rest of the area is in an undeveloped state that retains its primeval character. There are no permanent structures, and it is affected primarily by natural forces.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Outstanding opportunities for solitude exist throughout the area. In the badlands area, the topographic features allow visitors to be out of sight and sound from one another within relatively short distances. Opportunities for solitude are abundant because of topographic and vegetational screening at higher altitudes. These opportunities are further enhanced by the location of the area adjacent to existing wilderness values in Death Valley National Monument.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 38 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

This highly mineralized area has produced an estimated 14,600 ounces of gold and 2,057,000 ounces of silver. Tungsten has also been produced. Economic deposits of silver, copper, lead, and uranium have been identified.

Gold has been produced from four mines: the OBJ and the Tom Bonanza in the Tuber Canyon area, the Corona in Jail Canyon, and the Curran in the Panamint City area. There are three known deposits of gold in Happy Canyon area, the Mountain Girl and the High Grade group in the upper canyon, and an unnamed deposit, which probably has produced, located in the middle of the range. Gold also occurs at the Pappy mine high on the range north of Pleasant Canyon.

Silver mining has been concentrated in the Panamint City area. There are a minimum of 21 patented claims and 380 unpatented claims (filed with the BLM as of December 1979) in the Panamint City-Happy Canyon area. The patented claims are excluded from the WSA. Southwest of Panamint City the Sentinel Peak mine has estimated reserves of 15,400,000 ounces of silver, 14 million pounds of copper, and 14 million pounds of lead. West of this property is a uranium ore body which is being explored by drilling. Mining can be expected in this area.

Tungsten has been produced from the Pappy mine and occurs at many of the mines in the Panamint City area.

Geochemical data indicate most of the area from Hall Canyon north shows anomalous values of silver, lead, zinc, copper, and molybdenum.

Based on known occurrences, the highest potential for gold is near the granitic Hall Canyon Pluton in Tuber, Jail, Hall, and Lower Surprise Canyons, and in the Pre-Cambrian basement complex between Pleasant and Hall Canyons. The Pre-Cambrian complex is a favorable host for gold mineralization south of the WSA. Silver, lead, copper, zinc, and tungsten are found in the Panamint City area and elsewhere in the range. The whole range should be considered to have high potential for the above-mentioned minerals. Lead, silver, copper, zinc, tungsten, and molybdenum are strategic minerals.

Vegetation

Small amounts of desert riparian (cottonwood-willow) streamside woodland occur within this WSA in Panamint Canyon and Upper Surprise Canyon. Components of the general vegetation include sagebrush scrub, Utah juniper-one leaf pinyon woodland, allscale scrub, blackbrush scrub, desert holly scrub, creosote bush scrub, and succulent scrub.

Although not rare, Juniperus occidentalis, has its only desert outpost within the Panamint Mountains and is present in WSA 136.

Wildlife

The WSA is located in the Panamint Mountains, immediately west of Death Valley National Monument. The area is comprised of steep, rocky mountains dissected by narrow, rocky canyons containing wash systems. Vegetation is as varied as the topography, ranging from creosote-burrobush scrub at lower elevations to Great Basin sagebrush and pinyon-juniper woodland on mountain slopes. Canyon systems often contain riparian vegetation.

The Panamint Mountains contain several vertebrate species of limited distribution within the CDCA. Riparian systems provide refuge for species unable to tolerate extreme heat, such as the Panamint alligator lizard and the Utah black-headed snake. The pinyon-juniper belt provides 9 square miles of habitat for the Panamint chipmunk, approximately 20 percent of the Panamint Mountain population. Mountain slopes provide roosting areas for several species of bats, such as the western pipistrelle (4 sites), California myotis (1 site), and small-footed myotis (2 sites).

Canyon systems, mountain slopes, and a relative abundance of water from at least four springs in the area provide 12 square miles of desert bighorn sheep range. This is permanent range of the Panamint herd, numbering 228 individuals and declining from competition with an increasing burro population. A total of 2 percent of the range used by this herd, including 10 percent of the permanent range and 3 percent of the transient range, is present in WSA 136.

A relatively dense population of mule deer is contained in over 60 square miles. Approximately 8 square miles is used as foraging area for a roosting pair of prairie falcons. There may be a number of additional values; the area has not been well surveyed.

Cultural Resources

A good portion of this WSA is known to contain significant cultural resources.

Native American Interests

A vandalized village and burial site lie within this seasonally occupied Panamint-Shoshone territory. A recorded rancheria is tentatively located in a portion of the WSA. The entire southern portion of the range has been employed by the Panamint-Shoshone for pinyon collection.

Scenic Quality

Overall, the area has a "high" scenic quality rating. Although it contains portions of two scenic quality polgons, the WSA is dominated by the Panamint Mountains, which received high-medium scores for landform, color, and uniqueness and a low rating for vegetation. Views over the scenic Panamint Valley enhance the overall visual quality of the area.

General Recreation

The entire Panamint Range has high interpretive value both from a historic and prehistoric and a natural standpoint. Many of these sites are excluded from the WSA. Some of those excluded historic mining areas are also fair rockhounding areas. The entire area has good deer hunting and birdwatching opportunities. There are good floral displays along the lower alluvial fans.

Range Uses and Potential

No allotments fall within this WSA. Most of this WSA is in the Panamint Mountains Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Most comments described mining roads and activity. All were field-checked and appear on the map as appropriate. A substantial number of comments addressed the primitive-recreation opportunities for the region.

Study Phase

Of the 59 letters received on WSA 136, 40 opposed a wilderness designation for this area.

Sites and sounds from mining and nearby communities of Darwin and Ballarat were common factors felt to detract from the area's qualities of wilderness. Desires to mine for gold and silver, and have access for motorized vehicle use, rockhounding, hunting, and camping were commonly noted. One letter felt the Death Valley National Monument already protects enough flora and fauna in area, specifically the Panamaint daisy. One commentor discussed Ballarat's and Darwin's economical dependence in motorized vehicle users.

Those letters favoring wilderness designation often mentioned scenic quality and contiguity to the Death Valley National Monument. Desire for primitive recreation and protection of flora and fauna, especially streamside habitats, were also common discussion points. Ecological, educational, historic, and geologic values were mentioned as valuable wilderness qualities. One letter expressed the desire to explore old abandoned mines. A few told BLM to "kick off squatters who are mining illegally."

Twelve workbook responses were received. The majority recommend wilderness designation and preservation because of high scenic value and the endangered and rare Panamint daisy, Panamint alligator lizard, and the sub-species of speckled rattlesnake. Also stated was the fact that the area abuts a proposed wilderness area in Death Valley National Monument and is an integral ecological part of the land within Death Valley National Monument.

The remaining letters noted high mineralization and patented mining claims. It was felt that mineral potential should be developed and that past and future mining are not consistent with wilderness values.

One letter wanted existing use of the area maintained and disagreed with the entire wilderness concept.

A wide variety of public comments specific to WSA 136 was received in response to the Draft Desert Plan. For example, one indicated complete agreement with the Protection Alternative, another expressed a need for more wilderness than in the Protection Alternative, while another approved of the Use Alternative recommendations. Others called for recommending the entire study area and/or greater acreage of nonmountainous terrain as suitable for wilderness under the Balanced Alternative. Another was in agreement with the Use Alternative's recommendations. Another expressed that there was no rationale for reducing the size of the study area and contrasts with the comment that the area does not qualify as wilderness because of the many signs of man and mining development. In addition, wilderness was stated as providing protection to bighorn sheep, prairie falcons, and other raptors.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 136, Surprise Canyon, is recommended as nonsuitable for wilderness designation.

This heavily mineralized area has a long history of mineral production. Silver, gold, and tungsten have all been produced and more minerals have been located and potential for production exits.

The area, which ranked 38, is located next to an administratively endorsed wilderness area in Death Valley National Monument. Other than this, the area did not reflect any of the values established as desert-wide wilderness objectives. The conflicts between the wilderness resource and the geologic, energy, and minerals resources were resolved in favor of mineral development. It was determined that the history and identified potential were of greater significance than the wilderness value.

The entire WSA is recommended for Class L designation. The need to protect the several areas of cultural, Native American, and wildlife values was recognized. The Class L designation would provide the guidelines necessary to protect the known assets but may still provide the access needed to exploit the mineral potential.

IMPACT OF PROPOSED PLAN

The area is recommended for Class L. Generally the terrain is of two types - low, rolling bajada and rugged mountain. The designation is adequate to protect most wilderness values in the mountains. Location and the required mitigation can reduce the effect of most mining and grazing activities. Vegetation manipulation could severely impact some values. Off-road vehicle use on designated roads could degrade naturalness.

Impacts from mining, grazing and motorized vehicle use would generally be more severe on the bajada. The low sparse vegetation and smooth surfaces can not absorb intrusions.

The effect on scenic quality would be similar. The same project or activity on the bajada would result in more severe impact than in the mountains.

WILDERNESS STUDY AREA 137

Manly Peak

GENERAL DESCRIPTION

The area (35,150 acres)[1] is located northeast of the town of Trona in the western Panamint Mountains. The western boundary is a graded gravel road in Panamint Valley along the base of the mountains. The southern boundary is an improved access road through Goler Wash to Mengel Pass. The eastern boundary is the Death Valley National Monument boundary. And the northern boundary is an improved road through South Park Canyon. With the exception of patented mining claims, the area is entirely public land. The records indicate there are a number of recorded mining claims along the northern, western, eastern, and southern boundaries of the area. This WSA is 93 percent mountains, 5 percent alluvial fans and 2 percent disected fans.

WILDERNESS QUALITY

Description of Environment

The topography of the area varies from bajadas to steep, rugged mountains with large washes and canyons. The bajadas slope gently to the west and are interlaced with washes. Just east of the bajadas, the terrain changes abruptly to the steep, jagged Panamint Mountain Range. This range rises over 6,000 feet above the valley and has very jagged ridges, sharp peaks, and deep canyons. The variety of vegetation is extensive, beginning with sparse desert shrubs, such as creosote, and annual plants in the canyons. Water flows in large quantities, providing a riparian community with such plants as desert willow, cottonwoods, and cattails.

Natural Condition

The area has few permanent structures. Mining areas along the north and south boundaries have been excluded from further wilderness study. A few aerial cableways run into the canyon walls to the small, patented Radcliffe and World Beater Mines. These have not been excluded as their impact is not substantial. The area of road and mining activity at Manly Fall has been excluded, even where these mines are inactive, because the natural condition has been significantly impaired. The remainder of the area comprises a large block of public land where man's imprint is substantially unnoticeable. The boundaries of this study area are common with the roadless area boundaries.

[1]Portions of Ts. 22, 23 and 24 S., Rs. 44 and 45 E., MDM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Due to the nature of the terrain, outstanding opportunities for solitude exist. The diversity of landforms lends itself to a variety of outstanding opportunities for a primitive and unconfined type of recreation.

WILDERNESS STUDY AREA RANKING

This WSA was ranked 21 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Gold, silver, lead, zinc, and dolomite have been produced from this area. Within the Pre-Cambrian basement complex along the front of the Panamint Range there are seven mines which have produced gold: Southern Homestake, Moly McGuire, Gold Tooth, Lestro, Abney, Mineral Hill, and Valley Overlook. The Yellow Dog and Panamania are also gold deposits in this area. Located on the north slope of Manly Peak are the Redlands, Broken Jack, and Alta prospects. The owner of these mines is exploring for gold, copper, and tungsten. In the 1970s the Mineral Hill and Moly McGuire mines were extensively sampled. The Southern Homestake mine has been sampled and drilled; reserves are estimated at about 49,000 ounces of gold. Within the Noonday Dolomite, in South Park Canyon, the Honolulu-Bighorn mine produced 550,000 pounds of zinc, 350,000 pounds of lead, and 5,000 ounces of silver. The Honolulu-Bighorn mine reportedly contains ample reserves of zinc and will probably be mined again as economic conditions improve for this commodity. Lead and silver are reported from the Thunderbird and Vista mines in the upper part of South Park Canyon. Dolomite has been produced from deposits in Coyote Canyon. Clearly this area is highly mineralized and it holds real potential for future production of gold, zinc, lead, silver, and dolomite. Zinc, lead, tungsten, and silver are strategic commodities. The U.S. must import gold, zinc, tungsten, and silver due in part to lack of current producers here.

Vegetation

No unusual plant assemblages occur within WSA 137. Components of the general vegetation include sagebrush scrub, Utah juniper-one leaf pinyon woodland, allscale scrub, blackbush scrub, desert holly, creosote bush scrub, and succulent scrub. No sensitive plant species are known to occur within this WSA.

Wildlife

Wilderness Study Area 137 is located northeast of the town of Trona on the western slope of the Panamint Mountains. The area includes a number of canyons draining west. Terrain is rugged, composed of steep, rocky mountains rising to an elevation of over 6,000 feet. Canyon systems with an abundance

of water supplies support riparian vegetation such as cottonwoods and willows. Vegetation at lower elevations consists of creosote bush scrub, while mountain slopes support pinyon pine and juniper.

The western portion of the Panamint Mountains supports 24 square miles of desert bighorn sheep permanent range for the Panamint Mountains bighorn herd, which numbers 225 individuals. The area also contains an additional 16 miles of bighorn sheep transient range, which is approximately 5 percent of the total range of the herd, including 25 percent of the permanent range and 2 percent of the transient range.

The Panamint kangaroo rat, a BLM proposed sensitive species of very limited distribution, has been recorded from one site. Two eyeies and approximately 50 square miles of foraging area are also used by prairie falcons.

There is potential habitat for two very rare species, the Panamint alligator lizard and the Utah black-headed snake, as well as several species of birds in the riparian areas.

Cultural Resources

Two areas of cultural resource sensitivity are located within this WSA.

Native American Uses, Needs, and Sites

This WSA includes a wide variety of resources traditionally exploited by the Panamint Shoshone. Balleva grass, bunch grass, chia, and willow have all been reportedly collected by this group in this area. Historically, bighorn sheep have also been taken. There has been extensive use of the area by Native Americans. There are little specific data available from the desert-wide inventory.

Scenic Quality

The study area has "high" scenic quality. Scores in the high-medium range were given for landform, color, and uniqueness, while a low score was given for vegetation. Views over the scenic Panamint Valley enhance the overall visual quality of the area.

General Recreation

There are two potential interpretive sites in the WSA. South Park Canyon was rated low, Manly Peak is unrated. There is a teaching and research site used more than eight times per year by pre-college, college, and university students. There is fair deer hunting throughout most of the area and good floral displays along the alluvial fans of the western border. There are excellent birdwatching opportunities throughout most of the area.

Range Uses and Potential

No allotments fall within this WSA, although it is in the Panamint Mountains Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Many comments were received relating to the existence of roads, mines, and other permanent structures. Field examination verified many of these, causing the division of the area into WSA 137 and WSA 137A. Other comments recognized the primitive recreation potential and overall natural condition of the landscape.

Study Phase

Of the nearly 50 comments received about WSA 137, nearly three quarters support a multiple-use designation for the area. Mineral potential (gold and silver) seemed to be the most common concern. Many felt it took priority over other uses. Recreational opportunity for motorized vehicle use, camping, trailriding, rockhounding, and photography was shown to be desired. Indian Wells and Ballarat's economies were said to depend upon such recreation activities. Sights and sounds nearby from the Naval Weapons Center and mining activities were listed as detrimental to the area's potential. Management of wilderness adjacent to the Naval Weapons Center and Death Valley National Monument was felt to be too costly to taxpayers as agencies would be patrolling in gunshot range of one another. Others felt there were already enough protected areas, specifically the Panamint daisy's abundant protection in Death Valley National Monument.

The comments supporting wilderness designation also discussed thoroughly the area's contiguity to the Naval Weapons Center and Death Valley National Monument. Many felt the area should be an extension of the Monument and management would be enhanced because of the location. Scenic, ecologic, geologic, historic, educational, and vegetative qualities were listed, though not frequently. Some discussion of the South Park Canyon Road was included. While some felt the road connection with Pleasant Canyon Road was questionable, one felt the entire road should be a corridor through the area.

Nine letters in response to the workbook were received concerning this WSA. The comments were almost evenly divided between those who favored wilderness and those who wanted generally unrestricted mining opportunities.

Draft Plan Alternatives

The following range of public comments specific to WSA 137 was received in response to the Draft Desert Plan Alternatives. One agreed with the Protection Alternative, another agreed with the Use Alternatives recommendations, while a third sought more wilderness than in the Protection Alternative. Another called for recommending the entire study area and/or greater acreage of nonmountainous terrain as suitable for wilderness under

the Balanced Alternative. In addition, wilderness was stated as providing protection for bighorn sheep and prairie falcons and other raptors.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Manly Peak Wilderness Study Area (137) is recommended as nonsuitable for wilderness designation.

Historically, the area has been a producer of many minerals, and exploration is currently being conducted. The area holds high potential for future production. Recreation is an important consideration. Many opportunities exist for both motorized and nonmotorized types. Other traditional uses are for education and hunting. The area has significant cultural and natural resources which need to be protected. Large areas of wildlife habitat and cultural resource sensitivity are located within the borders of this WSA.

Although the area ranked high (22) and joins an administratively endorsed wilderness area in Death Valley National Monument, it was decided that the value of the geology, energy, and minerals resources and recreation resources in the area were of greater significance than the value of the wilderness resource. It was felt that this decision was in accord with the general desert-wide wilderness objectives. The area was recommended for Class L to provide for restricted use while protecting the natural, cultural, and scenic values.

IMPACT OF PROPOSED PLAN

The rugged mountain area is recommended for Class L. With proper mitigation, mining and grazing activities could be absorbed into the area without significant impacts. Their presence would tend to reduce opportunities for unconfined types of recreation, but the effect could be localized. Motorized vehicle use along designated routes would reduce naturalness.

WILDERNESS STUDY AREA 137A

Middle Park Canyon

GENERAL DESCRIPTION

The western boundary of this area (8,500 acres)[1] is a graded road in Panamint Valley along the base of the Panamint Mountains. The southern boundary is an improved road through South Park Canyon. The eastern boundary is improved dirt roads connecting South Park and Middle Park. With the exception of patented mining properties, the entire area is public land. There are a number of recorded mining claims in the eastern half of the area. This WSA is 90 percent mountains, 5 percent highly dissected fans, and 5 percent hills.

WILDERNESS QUALITY

Description of Environment

The topography of the area varies from bajadas to steep, rugged mountains with large washes and canyons. The bajadas slope gently to the west and are interlaced with washes. Just east of the bajadas, the terrain changes abruptly to the steep, jagged Panamint Mountain Range. This range rises over 7,000 feet above the valley, and has very jagged ridges, sharp peaks, and deep canyons. The variety of vegetation is extensive, beginning with sparse desert shrubs, such as creosote and annual plants in the bajadas, leading to a pinyon-juniper woodland in the higher elevations. Within the canyons, water flows in large quantities, providing a riparian community with such plants as desert willow, cottonwoods, and typha.

Natural Condition

The area is largely subject to natural forces. A few areas isolated in the deep canyons show the imprint of man and have been excluded from the Wilderness Study Area, as follows: (1) roads through Middle Park Canyon to the Goldbug Mine and the tram and way north to Pleasant Canyon; (2) the road and mined areas at the World Beater mine; (3) roads and ways in Middle Park and South Park; and (4) road and mining activity at the Suitcase mine in South Park Canyon. All patented mining properties are also excluded. The remainder of the roadless area is in unaltered condition where the works of man are absent. This region, where natural forces are the only evident forces, comprises the Wilderness Study Area.

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[1]Portions of T. 22 S., Rs. 44 and 45 E., MDM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The dramatic terrain provides secluded canyon areas and broad, expansive views from the ridgetops. Outstanding opportunities for solitude or a primitive and unconfined type of recreation are assured by these features.

WILDERNESS STUDY AREA RANKING

This area is ranked 88 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

In the Pre-Cambrian basement between Pleasant and South Park Canyons there are five gold mines and one zinc-lead-silver mine. The gold mines are the Shooting Star, Suitcase, World Beater, Cecil R., and Radcliffe. Three of these, the Radcliffe, World Beater, and Suitcase, are major past producers. The Suitcase mine in lower South Park Canyon produced about 10,000 ounces of gold. The World Beater mine in Pleasant Canyon produced about 12,000 ounces of gold and the Radcliffe, adjoining the World Beater to the west, produced about 63,000 ounces of gold. The Cecil R. mine on the lower slope of the range has a recorded production of 55 ounces of gold but the total production is undoubtedly more. Zinc, lead, and silver have been produced from the Red Cloud mine in the upper part of the South Park Canyon.

In 1979 the Radcliffe mine was examined with the intention of reopening it. Since the 1960s the Suitcase mine has been examined on at least two occasions; it contains an estimated 14,000 ounces of gold. The Cecil R. mine has been extensively drilled and sampled. Although the results were not available to the BLM, the owner indicated the results were very encouraging. East of the Radcliffe mine, the Rader Mining Company is exploring another old mine for gold and silver values.

The above-mentioned mines for the most part are excluded from the WSA. The WSA boundary is the claim boundary or the limit of disturbed ground. Clearly, this area is mineralized, and deposits of gold, silver, zinc, lead, or tungsten (reported from the Radcliffe mine) should be expected inside of the WSA.

There are 13 patented claims in this area and a portion of 209 unpatented claims.

Vegetation

A small amount of desert riparian vegetation is present in Pleasant Canyon. A general description of the vegetation includes creosote bush scrub, allscale scrub, desert holly scrub, and succulent scrub. The only rare species present in WSA 137A is Brickellia knappiana found in lower Pleasant Canyon.

Wildlife

The area falls within the permanent range of the desert bighorn sheep. The bighorn herd in this area is believed to be declining. The area contains mule deer concentrations in the mountains and canyons. Prairie falcons forage throughout the lower elevations.

Cultural Resources

Two areas of cultural resource sensitivity are located within this WSA.

Native American Uses, Needs, and Sites

The area included in this WSA is a portion of traditional Panamint-Shoshone pinyon collection territory. The distribution and pattern of use closely resemble the seasonal occupation and exploitation pattern described in WSA 137.

Scenic Quality

The study area encompasses a small portion of a scenic quality polygon with high scenic quality. It received high-medium scores for landform, color, and uniqueness and a low score for vegetation. Views over the scenic Panamint Valley enhance the visual quality of the area.

General Recreation

Middle Park, which offers an excellent example of a wineglass canyon, has been rated "low" for interpretation. Most of the area offers fair deer hunting. There are good floral displays along the lower elevations. There are excellent opportunities for birdwatching.

Range Uses and Potential

No allotments fall within this WSA, although it is in the Panamint Mountains Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

No comments were received.

Study Phase

Only four comments in response to the workbook were received. Most stated a strong desire to designate the area as wilderness because of the rich endemic plant species and diverse wildlife. One response mentioned ownership of patented property at Clair Camp (mining interest) and desired no wilderness designation to eliminate trespassing and vandalism.

Draft Plan Alternatives

The following range of public comments specific to WSA 137A was received in response to the Draft Desert Plan Alternatives. One agreed with the Protection Alternative, another agreed with the Use Alternative's recommendations, while a third sought more wilderness than in the Protection Alternative. Another called for recommending the entire study area and/or greater acreage of non-mountainous terrain as suitable for wilderness under the Balanced Alternative. In addition, the area was not considered to qualify as wilderness because of the many signs of man, particularly mineral use.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Middle Park Canyon Wilderness Study Area, 137A, is recommended as nonsuitable for wilderness designation.

Historically, the area has been a large mineral producer and the boundaries of the WSA are determined, to a great extent, by mining operations. In many cases the borders of the areas are at the limit of disturbed ground resulting from mining activities. There is no reason to doubt that mineralization exists within the WSA.

A small amount of riparian vegetation (an unusual plant assemblage) is found in Pleasant Canyon, along with a rare plant species (Brickellia knappiana).

The area includes 5.5 square miles of very high cultural sensitivity and 3 square miles of high cultural sensitivity. The area is a traditional Panamint-Shoshone collection territory.

The WSA was rated 88 in terms of relative wilderness values. It was decided that the geologic, energy, and minerals resource values exceeded those of wilderness. It was felt that this decision was in keeping with the overall desert-wide wilderness objectives.

The WSA was recommended for Class L to permit limited mining exploration and development while protecting the natural and cultural values.

IMPACT OF PROPOSED PLAN

Except on the bajadas to the west, the Class L designation would provide adequate protection to sensitive values. Grazing and mining operations would be highly visible in the flatter areas and would affect wilderness quality. Motorized vehicle use on designated routes on the bajada would reduce naturalness of the area. Activities could be more readily accepted in the rugged interior where impacts if mitigated could be localized. Vegetation is extensive and varied, and attempts at manipulation could result in significant adverse impacts.

WILDERNESS STUDY AREA 142

Slate Range

GENERAL DESCRIPTION

The area (91,400 acres)[1] includes portions of the Slate Mountains and Panamint Mountains and is located northeast of Trona. The northern boundary is an improved dirt road that leads from State Route 178 to the ghost town of Ballarat, where the boundary proceeds south along the east side of the Panamint Valley to Goler Wash. Then, it turns east up Goler Wash to the Death Valley National Monument. The boundary follows the monument border east then south to the U.S. Naval Weapons Center, which is the southern boundary. The western boundary consists of State Route 178 and an improved road leading from it to the Naval Weapons Center. This area is predominantly public land with approximately five random blocks, or 2 percent, non-public land. The records indicate there has been an invasion of ten sites by a number of recorded mining claims on the western edge and in the south-central portion of the area. This WSA contains 65 percent mountains, 10 percent playas, 10 percent plains, 5 percent alluvial fans, 5 percent hills, 3 percent dissected fans, and 2 percent highly dissected fans.

WILDERNESS QUALITY

Description of Environment

The terrain of this area is diverse and includes the Slate and Panamint Mountains, which have large canyons and an associated bajada. The area also includes Panamint Valley and a large salt pan located just east of the Slate Range. The Slate and Panamint Mountains are varied in topography, having smooth and jagged ridges, sharp peaks, flat mountain tops, shallow washes, and steep canyons. The mountains are rocky and display a variety of colors from tan to red to gold. The associated bajada gently slopes south and east into Panamint Valley and is interlaced with very shallow washes. Panamint Valley is virtually flat and broken by only a few shallow washes. The valley gently slopes to the south and contains a large salt pan in the eastern portion. The vegetation of this area is mostly found in the bajada and lower elevations of the mountains. It consists mainly of low desert shrub, with the dominant plant being creosote bush scrub. There are also a few scattered cholla in the bajada.

[1]Portions of T. 22 S., Rs. 43 and 44 E., T. 23 S., Rs. 43 and 44 E.; and T. 23 S., Rs. 45, 44, 45, 46, and 47 E., MDM.

Natural Condition

The western section, from the Slate Mountains to the boundary, has been excluded from further wilderness study for the following reasons:

(1) the northern part of this section has a currently active quarry which displays extensive bulldozing and large land scars. There is a maintained two-lane dirt road leading to a telephone relay tower, and there is a maintained dirt road leading to a mine. All of these permanent structures are easily seen in this section and detract from the naturalness of the area.

(2) The southern part of this section is laced with roads and ways leading to abandoned and current mining activity. Both the abandoned and current mines display large, easily noticeable scars. The Trona Airport and zones of private land also exist in this area. The radio tower access road and the Bundy Canyon mining access roads have been excluded because of the purpose and the maintained character of the road.

The remaining area has been affected primarily by natural forces. There are a few primitive ways in Panamint Valley, none of which detract from the naturalness of the area. The portion of the roadless area outside the Wilderness Study Area boundary lies between State Route 178 and the crest of the Slate Range south and west of VABM 3362.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The area, with its diverse terrain of jagged peaks and steep canyons, sloping bajadas, and flat valley, offers outstanding opportunities for solitude because of the ability of the topography to screen visitors from one another. The diverse landforms and pristine condition lend themselves to outstanding opportunities for primitive and unconfined types of recreation. These opportunities are further enhanced by adjacent wilderness values in Death Valley National Monument.

WILDERNESS STUDY AREA RANKING

This WSA ranked 14 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Wilderness Study Area 142 includes the southernmost part of Panamint Valley and the Panamint Range and a large portion of the Slate Range. Gold has been the primary commodity produced from this area, however some silver reportedly has been produced. There is high potential for production of halite (salt) and uranium and a lesser potential for pumice, perlite, bentonite, zeolites, and tungsten.

The southeastern portion of the Panamint Range is covered by an extensive volcanic terrain. There are no known metallic mineral localities in the volcanic terrain, although uranium and thorium anomalies were detected by an airorne gamma-ray spectrometer survey. There is potential for the occurrence of pumice, perlite, bentonite, and zeolites. No known mineral extraction has occurred here.

Within the Panamint Range west of the volcanic terrain there are rock types which are favorable for metallic mineralization. The Pre-Cambrian basement, a favorable rock type for gold mineralization throughout the Panamint Range, crops out south of Goler Canyon. In this area the Lotus mine produced about 1,000 ounces of gold. Gold has been mined at the Lotus mine within the last 20 years and the owner is making arrangements for additional mining. North of the Lotus is a small gold mine, the Toleta. South and west of the Lotus, within a limestone formation, the Crescent mine reportedly produced lead-silver ore. There are 29 unpatented claims (filed with the BLM as of December 1979) in the Lotus Mine area.

Within Panamint Valley there are known occurrences of halite (salt) and there is potential for potassium, a wide range of metallic minerals, and uranium-thorium. A large part of the Panamint Valley portion of WSA 142 is within a potassium reserve, established by act of the President. In the southern part of Panamint Lake a drill hole penetrated halite beds 250 feet thick. Additional drilling is necessary to determine reserves of halite and/or potassium here. Saline Valley and Searles Lake have high metal concentrations in the saline brines. This closed basin holds potential for similar deposits.

Outside of the potassium reserve, there are uranium and thorium anomalies (detected by an airborne gamma-ray spectrometer survey). A Las Vegas-based corporation located claims in parts of the area and intended to drill to determine the uranium content of the sediments, but the results of this proposed drilling operation are not known.

The western border of WSA 142 generally follows the ridgeline of the Slate Range. The majority of the mines in the Slate Range are on its western slope, outside the WSA. However, the southwestern corner of WSA 142 does not follow the ridge and includes the Manly Pass shear zone. The Stockwell mine, a gold mine, has been leased for the last five years. There is a potential for additional gold occurrences along this shear zone within WSA 142.

On the east slope of the Slate Range the January Jones mine has produced about 4,000 ounces of gold. In 1965 the mine was examined with the intention of reopening it. The mine is currently claimed, and the claim is filed with the BLM. There is potential for gold, silver, and tungsten in limestone outcrops on this side of the Slate Range. These commodities have been mined from limestone outcrops on the west side of the range.

Vegetation

No unusual plant assemblages occur within WSA 142. Vegetation consists mostly of desert holly scrub, allscale scrub, and creosote bush scrub with some mesquite thickets. No rare plant species are known to occur within this WSA.

Wildlife

Wilderness Study Area 142 contains two areas (80 square miles) of transient bighorn sheep range. This includes 50 percent of the bighorn range used on a transient basis in the Slate Range. Approximately 5 percent of the range of the Panamint Range bighorn sheep herd, including 2 percent of the permanent range and 5 percent of the transient range, is also present here.

Two prairie falcon eyries and associated foraging areas are known. About 12 square miles of mule deer concentration areas are included. Five springs in the Panamint Range are especially useful to wildlife.

Cultural Resources

Two areas of cultural resource sensitivity are located within this WSA.

Native American Uses, Needs, and Sites

The south end of the Panamint Range within this area contains resources traditionally exploited by Owens Valley Pauite, Shoshone, and Panamint Shoshone from the Death Valley area. Material continues to be collected from the Needles Peak area. The pattern of use for the area is similar to that in the Manly Peak and Gold Hill regions.

Scenic Quality

Overall scenic quality in this area was rated "medium." It consists of portions of three scenic quality polygons with scores for each of the key factors generally falling in the medium range. Scenery in the Panamint Mountain portion is the most impressive and the least visually intruded. The scenic quality in this portion was rated high.

General Recreation

The geological features of the Slate Range have been identified but not evaluated for interpretation. Two sites, the Chinese Wall and Post Office Springs, have been rated medium for interpretation. There is fair hunting in the central portion of the unit and good floral displays on the alluvial fans of the lower elevations. Excellent birdwatching opportunities are available in the central portion of the unit.

Range Uses and Potential

No allotments fall within this WSA. The WSA, however, contains portions of the Coso Basin, Slate Range, and Panamint Mountains Herd Management Areas.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments referred to roads and mining activity which, after further field check, were excluded from the Wilderness Study Area where appropriate.

Study Phase

Thirty-four letters were received on WSA 142 and 18 on WSA 141, which was combined later with WSA 142. Of the total 52 letters exactly half favored wilderness designation and half opposed the designation.

Mining potential for tungsten and recreation desires were the most common opposition concerns. Recreationists felt the dunes were excellent for motorized vehicle use for rockhounding for obsidian, sheelite, limestone, and quartz. Trailriding, hunting, and camping were other recreation concerns. Others felt the area was too "flat, muddy, desolate" and the microwave site, active mines, and nearby urban areas and general sites and sounds deprive the area of wilderness quality. Indian Wells' and Ballarat's economies were said in one letter to depend on motorized vehicle use in area.

Those who favored wilderness designation felt the area was scenic (especially Amargosa Wash and the east side of the mountain range, Goler Wash, and Old Crescent mine). Contiguity to Death Valley National Monument was felt by many commenters to enhance the area's wilderness potential. Repeated concern was indicated for protection of flora and fauna, specifically the sagebrush lizard, striped whipsnake, and desert spiny lizard, which are found in the Funeral Mountains. Desire for primitive recreation and educational, ecological, and geological study was often discussed. Some suggested deleting active mines from the wilderness areas.

Three workbook responses were received. All strongly favored designation of WSA 142 as wilderness. The area contains bighorn sheep and good bighorn habitat in the eastern part (Panamint Mountains). The National Park Service agreed the area is compatible with proposed wilderness in Death Valley National Monument.

Draft Plan Alternatives

A variety of public comments specific to WSA 142 was received in response to the Draft Desert Plan Alternatives. For example, one indicated complete agreement with the Protection Alternative, another agreed with the Use Alternative, while a third sought more wilderness than in the Protection Alternative. Another expressed the need to protect the Panamint Valley

burros. In addition, the view was expressed that a rationale was not given for reducing the size of the study area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Approximately 40 percent of WSA 142, Slate Range, is recommended as suitable for wilderness designation.

The area displays a high potential for halite and uranium production and a lesser potential for pumice, perlite, bentonite, zeolite, and tungsten. In the Panamint Valley there are known halite deposits and a potential for potassium, plus a wide range of metallic minerals and uranuim and thorium.

The WSA also provides a transient bighorn sheep range, two prairie falcon eyries and foraging area, and a concentration of mule deer. Seven square miles of high cultural sensitivity exists in the east and one square mile of high cultural sensitivity exists in the west.

This highly rated (14) WSA was designated as suitable in the eastern portion, where its northern and eastern borders join the administratively endorsed wilderness area of Death Valley National Monument. This compromise is in keeping with the desert-wide wilderness objectives. With the exception of one culturally sensitive area, the WSA includes most natural and cultural resources. It was decided that the western portion should be designated as Class L. This classification would provide for limited geologic, energy, and mineral exploration and development and recreation use, while providing the necessary protection for the natural and cultural resources.

IMPACT OF PROPOSED PLAN

Mineral exploration in the Class L area could significantly degrade wilderness values. Structures, facilities, and roads would not lend themselves to mitigation in this terrain.

WILDERNESS STUDY AREA 143

Funeral Mountains

GENERAL DESCRIPTION

The area (48,980 acres)[1] is bordered on the north by the California/Nevada border, on the east by State Route 127, on the south by State Route 190, and on the west by Death Valley National Monument. The area includes approximately nine scattered sections of non-public lands accounting for over 5 percent of the total land area. There are a number of recorded mining claims in the central portion of the study area. This WSA contains 50 percent mountains, 25 percent alluvial fans, 10 percent playas, 5 percent dissected fans, 4 percent badlands, 3 percent highly dissected alluvial fans, 2 percent riverwashes, and 1 percent plateaus.

WILDERNESS QUALITY

Description of Environment

This area includes the rugged and colorful southern extension of the Funeral Mountains, Pyramid Peak, and the enclosed valley called Red Amphitheater. Also included are creosote-covered bajadas and the northern portion of the Amargosa River. Interesting geologic formations along with steep, sloping ridges and narrow canyons contrast with a large interior valley. Vegetation is sparse on the rocky mountain mass and in the interior valleys and washes. Stands of creosote are broken by linear concentrations of mesquite along the route of the Amargosa River. The area also contains a historical railroad grade and the site of the abandoned community of Scanlon. The area includes bighorn sheep habitat and a historic railroad.

Natural Condition

The portion of the roadless area where man's work is substantially unnoticeable includes the Funeral Mountains and bajadas north and south of the mountains. This portion of the area has retained its primeval character and influence. The eastern portion has been excluded from wilderness consideration. Active and inactive mines, tailings, prospects, and roads penetrate much of this excluded portion. A large milling operation, as well as sites of past structures, a railroad, and a townsite, along with associated ways, also contribute to this portion's being affected in such a way that man's work is substantially noticeable. This excluded portion parallels a primitive way and the old railroad grade in the south and avoids

[1] Portions of T. 25 N., Rs. 3, 4, and 5 E.; T.26 N., Rs. 3,4 and 5 E.; T. 27 N., R. 4 E.; and T. 28 N., R. 4 E., SBM.

patented active mine operations at Section 18 (T. 18 S., R. 49 E.), as well as the abandoned townsite of Scanlon.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Opportunities for solitude or a primitive and unconfined type of recreation are outstanding. Narrow, winding canyons and large, rugged peaks and ridges create solitude. Primitive types of recreation are enhanced by being adjacent to a proposed wilderness area (National Park Service), which would encompass the majority of the Funeral Mountains, a part of the Amargosa Range.

WILDERNESS STUDY AREA RANKING

This area is ranked 39 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

This WSA includes the eastern Funeral Mountains and some of the surrounding unconsolidated alluvium.

The northeastern tip of the WSA contains the Sidehill bentonite deposit. This former producer occurs in Tertiary sediments. These sediments contain another bentonite deposit approximately 2 miles west of Sidehill, also within the WSA. Tertiary sediments throughout the area have excellent potential for bentonite. Sepiolite, a clay used in carvings and pipes, and hectorite, which is used in clarifying beer and as a high-temperature drilling mud, occur east of the WSA near Franklin Well.

The USGS has classified the alluvial areas northeast of the Funeral Mountains as prospectively valuable for sodium, oil, and gas, and as a Potential Geothermal Resource Area (PGRA). The alluvial areas southwest of the Funerals are classified as prospectively valuable for sodium, oil, and gas.

Vegetation

The only unusual plant assemblage in WSA 143 is the riparian vegetation associated with the Amargosa River. The main components of the vegetation within WSA 142 include allscale scrub, mesquite thicket, saltgrass meadow, and creosote bush scrub. No rare species are known to occur within this WSA.

Wildlife

The elevation of WSA 143 changes from about 2,200 feet near Death Valley Junction to 6,700 feet at Pyramid Peak. A variety of habitat types are represented from creosote to pinyon-juniper associations.

This WSA includes the southeastern extension of the Funeral Mountains. The majority of this mountain range is contained within Death Valley National Monument; however, a substantial amount (10%) of the Funeral Mountains bighorn sheep herd's range is found within this WSA. This includes 17 square miles of permanent range (15%) and 17 square miles of transient range (75%). This herd of about 60 sheep is declining in numbers at the present time. At least one spring has been documented in the southern Funeral Mountains.

Cultural Resources

Two areas of cultural resources sensitivity or significance are located within this Wilderness Study Area.

Native American Uses, Needs, and Sites

Within this WSA are the Funeral Mountains, Pyramid Peak, Franklin Pass, and Winters Peak, which are areas used by the contemporary Panamint Shoshone and some Grapevine/Pahrump Paiute.

Scenic Quality

This area has an over-all scenic quality rating of "high." It is dominated by the Funeral Mountains, which received high-medium scores for landform, color, vegetation, and uniqueness. The visual quality of the area is enhanced somewhat by views over the scenic Amargosa River Valley.

General Recreation

There are no known recreation resources in this WSA.

Range Uses and Potential

No allotments fall within this WSA. The western edge of the WSA touches the Ash Meadows Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

One comment discussed areas that did not contain wilderness values, pointing out agricultural development, swellings, and other imprints of man. This portion of the area was never considered for further study. All other comments support the findings.

Study Phase

Of 14 comments received on WSA 143, 9 supported designating the area as wilderness. The area's scenic quality, bighorn sheep, and contiguity to Death Valley National Monument were qualities repeatedly listed by commenters as enhancing the area's wilderness potential. Two letters discussed the

area's primitive recreational potential: climbing, hiking, photography, and nature study.

Two boundary alterations were suggested: (1) consolidate this area with Death Valley National Monument, and (2) extend the eastern boundary to State Route 127.

The letters opposing wilderness designation listed sites and sounds of highways, milling operations, and mines. One letter was concerned about road access for mining.

Four workbook responses were received. They suggested a boundary change: move the southern boundary away from State Route 190. They also noted that the area is a major access route from western Nevada to southern California; therefore, the area would be difficult to manage as wilderness. One letter suggests excluding fan and bajada areas from wilderness consideration.

Draft Plan Alternatives

No public comments specific to WSA 143 were received in response to the Draft Desert Plan Alternatives.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 143, Funeral Mountains, is recommended as nonsuitable for wilderness designation.

The area contains known deposits of minerals, in addition to an excellent potential for others. The USGS has classified the area as prospectively valuable for oil, gas, and geothermal resource development. The riparian vegetation associated with the Amargosa River is designated as an unusual plant assemblage. Wildlife, cultural, and Native American resources are significant. Although the area's relative wilderness ranking is high (39) and the WSA's western edge joins an administratively endorsed wilderness area in Death Valley National Monument, it was decided that the existing and potential mineral resources were of greater significance. Desert-wide wilderness objectives were considered in this decision.

With the exception of about 20 percent along the southern border, the WSA is recommended for Class L. This designation will protect the natural and cultural values in the sensitive area. Class M designation recommended for the remaining area is to provide access for mineral exploration in development of potentially valuable mineralized areas.

IMPACT OF PROPOSED PLAN

Potential mineral development in the flat areas along the north side of State Route 190 would have significant adverse effects in both Classes L and M as their impacts would be visible over great distances. Within the rugged Funeral Mountains the impacts of development may have less effect on the apparent natural condition. Topography may screen these impacts from view.

WILDERNESS STUDY AREA 145

Resting Spring Range

GENERAL DESCRIPTION

The area (195,500 acres)[1] is bounded on the north by a dirt road to Ash Meadows, on the south-southeast by State Route 178, on the east by the California/Nevada border, and on the west by State Route 127 and a telephone line maintenance road. Approximately 94 percent of the area is in public lands, with only a total of 10 square miles of non-public lands scattered throughout. Under the Act of Congress of November 9, 1921, a 40-acre materials site was set apart for the State Highway Department (now CALTRANS) for highway construction purposes in Section 10, T. 24 N., R. 8 E., SBM, on December 29, 1959. There are a number of recorded mining claims along the northern, western, and southern edges of the site. This WSA includes 45 percent mountains, 20 percent alluvial fans, 13 percent dissected fans, 10 percent playas, 5 percent highly dissected fans, and 2 percent riverwashes.

WILDERNESS QUALITY

Description of Environment

The area includes much of the Amargosa River Valley, the Resting Spring Range, and Eagle Mountain, a small mountain unit that rises steeply from the surrounding flat terrain. Eagle Mountain juts up abruptly from the surrounding Amargosa River Valley, standing in sharp topographic contrast to the surrounding area, with colorful bands of strata as a dominating feature. The Amargosa Valley comprises an alluvial plain that slopes downward to a dry lakebed just north of Eagle Mountain. It is sparsely vegetated with creosote and low desert shrubs and bounded on the west by the Amargosa River. The Resting Spring Range varies in topography from smooth, low, rolling hills to extremely coarse, rugged rock formations with jagged peaks and deep canyons. In some locations, the rocks display a variety of colors ranging from subdued browns and tans to more intense pinks, reds, greens, and black.

Natural Condition

The interior of the Resting Spring Range and the surrounding valleys are essentially pristine. Due to topographic variation, man's works, which include only a few primitive ways, are substantially unnoticeable. A small area at the very southern tip of the roadless area has been excluded from the area containing wilderness values because of a graded road to an active

[1]Portions of T. 22 N., Rs. 6 and 7 E.; T. 23 N., Rs. 6 and 7 E.; T. 24 N., Rs. 5, 6, 7, and 8 E.; and T. 25 N., Rs. 5, 6, and 7 E., SBM.

patented mine (Gerstley Mine) and structures on the west slope of the Resting Spring Range and a telephone line road. A short road to a ranch and another to a mine enter the area from the north and have also been excluded. With these exceptions, the boundaries of the Wilderness Study Area are common with the roadless area boundaries.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Opportunities for seclusion are provided in the rugged mountains and in the valley areas. A wide range of primitive recreation experiences are available, from the intimacy of small enclosed areas in the mountains to the spaciousness of the valleys. The lack of encroaching man-made features adds to the unconfined character of the area.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 28 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

The WSA contains known occurrences of lead, silver, zinc (all stategic commodities), gold, borates, lithium, and zeolites. There is potential for sodium, oil and gas, and geothermal energy. An active sand and gravel pit is included within the WSA boundaries.

There are two mineral deposits within the WSA that are being mined at the present time. West of Shadow Mountain, at the north end of the Resting Spring Range, clinoptilolite is being removed from claims inside and outside the WSA. Drilling to determine the reserves and resources of this deposit is currently under way. The deposit may contain over $1 billion worth of zeolites. Over 100 holes have been drilled on the deposit to date. The other active deposit is the Gerstley borate mine (S. 8, 9, 16, and 17, T. 22 N., R 7 E.). The mine site is barely excluded from the WSA, although much of the deposit is included.

The Baxter mine in the central Resting Spring Range produced lead, silver, zinc, and gold from 1915 to 1927. Smelter recovery is reported to have been 13.6 percent lead, 1.31 percent zinc, 10.3 ounces per ton of silver, and 0.068 ounces per ton of gold. The Red Wing deposit, north of the Gerstley mine, is another replacement lead-zinc body in dolomite. Lead-zinc-silver deposits in Pre-Cambrian and Paleozoic dolomites in both the Resting Spring and Nopah Ranges indicate a favorable geologic environment for such mineralization. This environment is present in the mountainous part of this WSA.

There is high potential for sodium in all basinal parts of the WSA, according to classification by the USGS North of T. 24 N., the USGS has identified a Potential Geothermal Resource Area (PGRA). West of R. 6 E. and north of

T. 24 N., the USGS classified the area as prospectively valuable for oil and gas.

There is potential for limestone and silica, based on known occurrences and environments in the Nopah Range. The Resting Springs Range has not been explored for these commodities. There is also potential for lithium. Economic studies by BLM indicate an estimated $52 million worth of lithium in the brines of Alkali Flat (Franklin Dry Lake). Sepiolite, a clay mineral used in high-temperature drilling, is known to occur in Sections 29, 20, 17, 8, and 5, T. 25 N., R. 6 E. and probably occurs in a much larger part of the basin.

The sand and gravel pit has been intermittently active since 1959.

There are over 130 unpatented mining claims within this WSA.

Vegetation

No unusual plant assemblages occur within WSA 145. Vegetation within the WSA consists mostly of allscale scrub and creosote bush scrub. Several sensitive plant species are located within this WSA. Nitrophila mojavensis and Cordylanthus tecopensis are growing in alkali mud just a few kilometers east of Death Valley Junction. To the south at the northern end of the Nopah range are two rare plants, Eriogonum contigrium and E. bifurcatom.

Wildlife

The area contains over 50 square miles of desert bighorn sheep transient range. This represents approximately 85 percent of the total transient bighorn sheep range present within the Resting Spring Range. There are two known prairie falcon eyries and two known golden eagle eyries. Most of the area provides foraging habitat for these two species of raptors.

Cultural Resources

Two areas of cultural resource sensitivity are located within this area.

Native American Uses, Needs, and Sites

The southwestern portion of this WSA contains Native American resources which are collected by contemporary Panamint-Shoshone and Chemehuevi. The Southern Ute Trail runs along the northern border of the WSA, and the Grapevine Spring village site lies just outside the northest border.

Scenic Quality

This study area, which covers portions of four scenic quality polygons, possesses an overall scenic quality of high-medium. The Resting Spring Range, which dominates the scenery, received medium scores for landform, color, and uniqueness and a low score for vegetation. Scenic views of the surrounding mountain ranges and over the Amargosa River Valley enhance the

scenery. A significant visual feature in the area is Eagle Peak, which received fairly high scores in landform, color, and uniqueness and a low score for vegetation.

General Recreation

This unit includes two unevaluated interpretive sites.

Range Uses and Potential

This WSA includes over half of the proposed Death Valley Junction Allotment. This allotment is not grandfathered. A small portion of the Pahrump Allotment, which is grandfathered, is in the WSA. The WSA takes in a portion of the Ash Meadows Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Many comments refer to potential mineral areas, with some references to specific sites already being used for exploratory work. These were field-checked and are reflected on the map where appropriate. A large number of comments supported the findings.

Study Phase

Twenty letters were received on WSA 145. Most of these letters were concerned about wilderness limiting or prohibiting access and exploration for minerals. The mining potential for zeolites, lead, zinc, silver, and gold was discussed. Sites and sounds of mines and roads were mentioned as detractions from wilderness potential.

The letters favoring wilderness designation discussed scenic quality, unique floral and fauna (prairie falcon and golden eagle), and opportunities for primitive recreation. Ecological, geological, and educational values were mentioned. Two boundary alterations were suggested: (1) consolidate all nearby inventory areas into one vast wilderness area and (2) designate the area as wilderness but exclude the mining areas in the southern end.

Three workbook responses were received. One suggests final action on the study should be delayed pending mineral surveys. Another objected to additional open roads as proposed because of the impact of man's activities on floristic elements in Jawbone Canyon and on Cache Peak. One response supported amending the WSA resulting from the protest.

Draft Plan Alternatives

One comment specific to WSA 145 expressed agreement with the Protection Alternative in response to the Draft Desert Plan Alternatives.

SUMMARY OF RATIONALE OF THE PROPOSED PLAN

Approximately 80 percent of Wilderness Study Area 145, Resting Spring Range, is recommended as suitable for wilderness designation. The remaining recommendations are roughly 15 percent in Class M and 5 percent in Class L.

Known occurrences of many minerials have been identified and the U.S.G.S. has classified the area as part of a Potential Geothermal Resource Area and an area prospectively valuable for oil and gas. A small part also falls into the Pahrump grazing allotment.

The area contains both golden eagle and prairie falcon eyries and foraging areas and bighorn sheep range. Two areas of cultural resource sensitivity are located within the borders, and the area is currently used by Native Americans.

The WSA rated high (28) in relative wilderness values, and for that portion of the area designated as suitable, the value of the wilderness resource was considered to be more significant than the competing resources.

The areas recommended as nonsuitable for wilderness were designated Class M in the north to permit access for mineral exploration and continued development and Class L in the southeast to allow restricted exploration and development while protecting the known cultural values.

IMPACT OF PROPOSED PLAN

The Class M designation at the north end of the area will have adverse effects. Mineral development in this flat terrain would be visible over great distances affecting solitude and the over-all natural condition.

WILDERNESS STUDY AREA 147

Greenwater Range

GENERAL DESCRIPTION

The area (131,000 acres)[1] is bounded on the north by State Route 190, on the south by State Route 178, on the east by State Route 127, and on the west by a graded dirt road through Greenwater Valley. The area consists primarily of public land. Scattered non-public lands account for approximately 6 percent of the land area. An Act of Congress of November 9, 1921, set apart a materials site for the California Department of Transportation (CALTRANS). This was for 40 acres located in Section 10, T. 23 N., R. 6 E., SBM, effective on November 24, 1939. There are a number of recorded mining claims in the northern and central portions of the area. This WSA includes 30 percent mountains, 25 percent alluvial fans, 20 percent dissected fans, 10 percent hills, 5 percent plateaus, 5 percent highly dissected fans, 2 percent badlands, and 1 percent riverwashes.

WILDERNESS QUALITY

Description of Environment

Roughly 12 miles across at its widest point and 32 miles long, this area encompasses approximately 300 square miles. Terrain varies considerably, ranging from smooth, flat valleys and bajadas to coarse, jagged mountains. Two major drainages divide the site into thirds. Through Greenwater Canyon the waters have carved a narrow passage through volcanic rock, leaving steep sides and a twisting course. At Deadman Pass the erosion has produced a wide interspace with gently sloping sides. Although the valleys are densely vegetated, the mountains and slopes tend to support only sparse growth. Creosote is the dominant plant in the area, although numerous, less conspicuous, species abound, including desert holly, sagebrush, prickly pear, cholla, and bunch and annual grasses.

Natural Condition

The northern boundary has been adjusted to exclude areas where man's impact has degraded the natural character. The exclusion includes active, abandoned mining operations, patented mining in Sections 21, 29, 31-33, (T. 25 N., R. 4 E.), a graded road, and a network of improved ways. The graded road leads east from Death Valley Junction past the remains of the abandoned Lila C mine (site of Old Ryan - now only tunnels, slag piles, and rusting equipment remain) to an area laced with old roads and mining claims at the

[1]Portions of T. 22 N., Rs. 4, 5, and 6 E.; T. 22 1/2 N., Rs. 4, 5, and 6 E.; T. 23 N., Rs. 4, 5, and 6 E.; and T. 25 N., R. 5., SBM.

mouth of Greenwater Canyon. A grid-like network of unimproved ways is located in the vicinity of the Lila C mine. At the site of the New Ryan, on the northern tip of the Greenwater Range, active and abandoned mining operations occur side by side. Tunnels, slag piles, and road scars exist here, as well as many of the old structures that were once inhabited by the population of Ryan. The remainder of the roadless area generally retains its primeval character and appears affected primarily by natural forces. Man's works, which include a few abandoned mine shafts and primitive ways, are substantially unnoticeable because of screening by terrain diversity and fairly dense vegetation.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

This area offers outstanding opportunities for both solitude and a primitive and unconfined type of recreation. Terrain and vegetative variety provide many areas and spaces where a sense of isolation and seclusion are readily available. A relative lack of internal man-made features allows freedom of unconfined movement throughout the site. In terms of primitive recreation, the area offers both challenge and diversity. The Greenwater Range area is bounded to the east and west by large areas that are also relatively pristine, adding to the opportunities for a quality primitive experience. These opportunities are further enhanced by the adjacent wilderness values in Death Valley National Monument.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 86 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for copper-molybdenum porphyry deposits, uranium, pumice, and sand and gravel. There is also potential for borates and lithium at the northern end. Six unpatented claims are recorded.

Vegetation

No unusual plant assemblages occur within WSA 147. Vegetation consists of creosote bush scrub, desert holly scrub, and allscale scrub. No sensitive plant species are known to occur within this WSA.

Wildlife

The more mountainous terrain in this study area is used as transient range by desert bighorn sheep. This section of the Greenwater Range forms an important corridor route for sheep populations in the Funeral Mountains to the north and Black Mountains to the south. The entire bighorn transient range in the Greenwater Range and bighorn corridor route between the Funeral Mountains and Black Mountains is present in WSA 147.

Portions of this area are also used for foraging by a nesting pair of prairie falcons and a nesting pair of golden eagles.

Cultural Resources

Two areas of cultural resource sensitivity are located within this Wilderness Study Area.

Native American Uses, Needs, and Sites

This WSA has village sites that lie along the eastern slope of the southern Greenwater Range, the old village site of Shoshone in the southeastern section, and collection areas throughout the southern Greenwater Mountains used by some members of the Panamint-Shoshone and Chemehuevi. The Panamint Shoshone share a berry-collection area and spring along the western border of the WSA with the Southern Utes. The Southern Ute Trail runs through the northern section of the WSA in a northwest direction. The Panamint Shoshone have a berry-collecting area in the extreme southeastern section of the WSA.

Scenic Quality

The scenic quality of this area, which includes portions of four scenic quality polygons, is "medium" overall. Scores for all of the key factors (landform, color, vegetation, and uniqueness) generally fall in the medium range. Of visual significance is Greenwater Valley, one of the very few unintruded, expansive valleys in the entire California Desert.

General Recreation

The unit includes an unevaluated interpretive site in Greenwater Canyon. The cannyon is of historic and prehistoric interest. There are four rockhound sites rated fair, three on the northern boundary and one on the southern boundary. There is good chukar and quail hunting in the northern and southern end of the Greenwater Valley.

Range Uses and Potential

There are no allotments in this WSA. The WSA includes a portion of the Ash Meadows Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Several comments referred to man-made features and permanent scars from active and abandoned mining operations. These areas were deleted where appropriate. The Deadman Pass Road shows no sign of maintenance for many years. Other comments indicated that too much area had been deleted and that rehabilitation potential was not considered.

Study Phase

Twenty-nine letters were received on WSA 147. Eighteen supported a wilderness designation. The major concern for this area of those favoring wilderness seems to be the question of the mines. Many felt the mines should be excluded, such as the Lila C., Old Ryan, and Greenwater Canyon Mines. Others felt the mined areas can be rehabilitated and should be included in the wilderness area. The area's contiguity to Death Valley National Monument was often noted as enhancing wilderness management. Wildlife, such as red-tailed hawks, great horned owls, and bighorn sheep, were noted for protection. Others were concerned that the pictographs in volcanic rock should be protected from vandals. Scenic, ecologic, educational, scientific, and geologic values were noted.

The letters opposing wilderness designation were overwhelmingly concerned about access and exploration for minerals. One letter discussed the road definition, calling it "capricious." Others spoke of the area as being too ugly to be designated wilderness, with mines and roads and signs of human existence. One letter was concerned that road closure would prohibit many from enjoying the pictographs.

Two letters in response to the workbook state that the WSA abuts Death Valley National Monument. The National Park Service suggested that WSAs 147 and 148 are compatible extensions of unmodified lands meeting wilderness criteria. One letter expressed the desire for the eastern boundary to be moved 3 or 4 miles away from State Route 127.

Draft Plan Alternatives

The following range of public comments specific to WSA 147 was received in response to the Draft Desert Plan Alternatives. One stated that the entire study area and the northern half of the polygon should be recommended as suitable for wilderness under the Protection Alternative. A second view was that the entire Wilderness Study Area should be recommended for wilderness under the Balanced Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Greenwater Range Wilderness Study Area (147) is recommended as nonsuitable for wilderness designation.

The area was rated 86 in relative wilderness value and did not possess any of the qualities identified as desert-wide wilderness opportunities. The site displays possible potential for metals and other minerals. Recreation opportunities are found throughout and include both motorized and nonmotorized types.

It was decided that the recreation resource and mineral values exceeded those of wilderness. The area was recommended for Class L to allow access for mineral exploration and development and provide for motorized vehicle recreational uses. This classification will protect the natural and cultural resources throughout the area.

IMPACT OF PROPOSED PLAN

Approximately 95 percent is recommended for Class L. Both large, flat, low rolling hills and the rugged Greenwater Range fall into this category. The impacts on the bajadas would be significant as these areas do not afford screening of disturbed sites. The far northern edge is recommended for a Class M designation and is also relatively flat. As this designation is compatible with greater mineral development, significant adverse impacts to the natural condition of the landscape will result. The more rugged Class L areas could accept some activities without significant impairment of the wilderness values. Some degree of mining and range improvements could be localized within the interior without significant impacts. Overall, the impacts of the Class C and M designations are negative.

WILDERNESS STUDY AREA 148

Greenwater Valley

GENERAL DESCRIPTION

The area (56,900 acres)[1] is irregular in shape because of its location adjacent to the Death Valley National Monument. Boundaries include a dirt road through Greenwater Valley to the east, State Route 178 to the south, and the Death Valley National Monument to the west. The area consists almost entirely of public land. Only a few sections of non-public land occur within the roadless area; these lands account for approximately 5 percent of the total area. There are a number of recorded mining claims in the south edge of the area. This WSA contains 50 percent mountains, 30 percent alluvial fans, 10 percent dissected fans, 5 percent highly dissected fans, 3 percent pediments, and 2 percent hills.

WILDERNESS QUALITY

Description of Environment

The area is dominated by the relatively gently sloping expanse of Greenwater Valley. To the south, the gentle eastern slopes of the Black Mountains enter the area. Vegetation is lush and dense on the valley floor but thins rapidly as elevation increases on the steeper mountain slopes. Creosote is the dominant plant, supported by sagebrush, annual and bunch grasses, seasonal wildflowers, and scattered cholla cactus.

Natural Condition

With the exception of a few primitive ways running through the roadless area, old mine sites, and scattered historic artifacts around the old mining town site of Greenwater, the area has remained in a natural state. Man's works are substantially unnoticeable because of the screening effects of the fairly dense vegetation. The area appears to be affected primarily by natural forces.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The area offers outstanding opportunities for solitude or a primitive and unconfined type of recreation. The relatively lush vegetation visually screens visitors from one another. Also, the lack of encroaching man-made features allows freedom of movement throughout the area. The area's location

[1]Portions of T. 21 N., R. E., T. 22 N., Rs. 4, 5, and 6 E.; T. 22 1/2 N., R. 4 E., T. 23 N., R. 4 E.; and T. 24 N., Rs. 4 and 3 E., SBM.

adjacent to administratively endorsed wilderness areas in Death Valley National Monument and to the relatively pristine Greenwater Range further enhances opportunities for solitude and primitive recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 13 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for copper, uranium, sodium, and oil and gas. One claim is recorded.

Vegetation

No unusual plant assemblages occur within WSA 148. Vegetation consists mostly of creosote bush scrub, desert holly scrub, and allscale scrub. No sensitive plant species are known to occur within this WSA.

Wildlife

Bighorn sheep occupy 36 square miles of seasonal range and 2 square miles of transient range in the WSA. This is approximately 10 percent of the total range for the Black Mountains bighorn sheep herd, estimated at 110 individuals and declining. Ten percent of the seasonal range and 3 percent of the transient range of this herd are present in WSA 148. A spring located near Calico Peak has significant wildlife values.

Cultural Resources

Two areas of known cultural resources sensitivity are located within this Wilderness Study Area.

Native American Uses, Needs, and Sites

This WSA exists within the traditional Panamint Shoshone and Chemehuevi territory. Timbisha is a sacred place of the Panamint Shoshone in the extreme southern portion of the Wilderness Study Area at Rhodes Hill. It was a place where iron oxide was found. Additional resources can be anticipated in the canyon and foothill areas near seasonally running springs.

Scenic Quality

The over-all scenic quality of this study area is "high." Scores for landform, color, and uniqueness fell in the medium range. Greenwater Valley rated higher for vegetation than the Salsbury Pass area. Greenwater Valley, one of the very few, unintruded, expansive valleys in the entire California Desert, is of visual significance in this study area. Scenic views of surrounding mountain ranges enhance the visual quality of the area.

General Recreation

This unit includes two historic mining districts of interpretive value. One rated low in value; the other is unrated.

Range Uses and Potential

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments noted the presence of old mining scars and activity as well as several jeep roads. An on-the-ground visit led to the conclusion that impacts did not have a significant influence on the natural values of the area.

Study Phase

Eighteen letters were received on WSA 148. Eleven letters favored a wilderness designation for the area. Many letters felt contiguity to Death Valley National Monument enhanced the area's wilderness potential. Other enhancement values such as scenery, ecology, geology, and scientific factors were mentioned. Bighorn sheep and wildlife in general were suggested for protection. Four of these letters favored a wilderness designation but desired road access. Specific roads desired to be left open were a vehicle corridor to Gold Valley and the road to the historical mining town of Greenwater. One letter urged rehabilitation of Greenwater historical mine site.

The letters opposing wilderness designation described sights and sounds such as mines, roads, and lack of vegetation that they felt decreased the area's wilderness potential. Mining concerns discussed the need for access and exploration. Gold and copper were specific minerals mentioned.

Two letters in response to the workbook were received. The National Park Service recommended that the road into WSA 148 be left open as a wilderness corridor to provide access to Gold Valley. One response wanted to exclude Death Valley Junction from the WSA and to move three boundaries: the western boundary away from State Route 127; the southeastern boundary away from State Route 178; and the northwestern boundary away from the Ash Meadows Road.

Draft Plan Alternatives

One public comment specific to WSA 148 agreed with the Protection Alternative in response to the Draft Desert Plan Alternatives.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The major portion of the Greenwater Valley Wilderness Study Area (148) (approximately 90%) is recommended as suitable for wilderness designation.

This WSA ranked very high (13) in terms of its relative wilderness values. The area also is located adjacent to administratively endorsed wilderness within Death Valley National Monument. These factors were important considerations in the determination that, in the portion recommended as suitable, the highest and best use was as wilderness.

The small area at the northern end of the WSA is recommended for Class L. The area has a past history of mineral exploration and includes the remnants of the mining town of Greenwater. The Class L designation would allow access for further mineral exploration and recreation use.

IMPACT OF PROPOSED PLAN

The Class L designation in the far northern section should have no significant impacts on wilderness characteristics.

WILDERNESS STUDY AREA 149

Ibex Hills

GENERAL DESCRIPTION

The area (36,500 acres)[1] is bounded on the north by State Route 178, on the east by State Route 127, on the south by a maintained road and the Death Valley National Monument, and on the west by the Death Valley National Monument. The area includes approximately eight sections of non-public land scattered throughout the area and accounting for approximately 7 percent of the total area. There are a number of mining claims along the northeastern portion of the study area. This WSA includes 50 percent mountains, 10 percent alluvial fans, 10 percent hills, 10 percent highly dissected fans, 7 percent dissected fans, and 3 percent riverwashes.

WILDERNESS QUALITY

Description of Environment

Phsical features in the area have a general north-south orientation along the wast side of Death Valley National Monument. The dominant features are the Ibex Hills and Black Mountains. Through the horizontal rock layers the colors of brown, bright yellow, red, and black produce a unique scenic effect. Peaks along these two mountain systems range between 3,000 feet and 4,752 feet on Ibex Peak. Greenwater Valley, just northeast of the mountain slopes, is 2-4 miles wide and 6-8 miles long and supports a good creosote bush scrub plant community. Good views of the unique coloration of the adjacent Ibex Hills can be seen from the valley. In the northeastern corner are the Dublin Hills, forming a backdrop for the town of Shoshone.

Natural Condition

Man's works dominate the landscape along the east side of the area. In the northern half a band of influence 2-3 miles wide exists, and in the southern half it increases to 4-6 miles. In the area east of the Dublin Hills, at the northern end of the roadless area, surface rock on several hills has been scraped away, presumably for use as decorative stone. A dwelling and several small mining prospects are also present. Private development associated with the town of Shoshone is evident. Just east of the southern end of the Dublin Hills random bulldozer scars severely detract from the primeval character of the land. Five miles south of Shoshone a maintained dirt road penetrates 1 mile into the roadless area for access to a microwave relay facility. Though considerably less improved, this road continues beyond the microwave site

[1]Portions of T. 20 N., R. 5 E.; T. 21 N., Rs. 5 and 6; and T. 22 N., Rs. 5 and 6 E., SBM.

into Greenwater Valley where maintenance apparently ends. Within the first 2 miles beyond the microwave site, numerous assessment holes dot the landscape. A wooden pole utility line enters the area near the microwave site and runs approximately 1 mile inside the eastern border. Approximately 4 miles further south from the microwave site a well-maintained gravel road and paralleling utility line run west 5 miles to two large, highly visible talc mines located midway up the west side of the Ibex hills. The white tailings are substantially noticeable from the east side of the roadless area. A patented mining claim south of Confidence Wash is excluded from the WSA. Scattered small-scale abandoned mines and apparently unmaintained access routes are occasionally noticeable; however, the degree of impacts of these developments upon the natural landscape is relatively unnoticeable. These developments do not significantly affect the primeval character of the landscape.

The Wilderness Study Area boundary encompasses a large block of undeveloped Federal land which generally appears to have been affected primarily by natural forces. The area boundaries are common with the roadless area boundaries west of a line of the following descriptions beginning at a point 10 miles east of Death Valley National Monument along Highway 178. The boundary leaves the highway at the north end of the Dublin Hills and follows the crest of these hills south to the center of Section 14 (T. 21 N., R. 6 E). The boundary then swings southwest across Greenwater Valley up a large wash to Ibex Peak where it follows the ridgeline of the Ibex Hills south to the Death Valley National Monument boundary. This Wilderness Study Area boundary excludes areas where man's imprint is substantially noticeable.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The scenic openness of Greenwater Valley, which is enclosed between the Dublin Hills and Ibex Hills, and the long washes through the Ibex Hills and Black Mountains offer seclusion in the broad unimpacted vistas and topographic isolation, thus providing outstanding opportunities for solitude. The size and diversity of the area offer outstanding opportunities for a primitive and unconfined type of recreation. These opportunities are further enhanced because the area is located adjacent to an administratively endorsed wilderness area in Death Valley National Monument.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 73 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Many mineral resources occur within this WSA. There are known deposits all over the area. Almost every rock type has high potential: lead, silver, copper (all strategic minerals), barite, and gold in Pre-Cambrian metamorphic rocks; lead, silver, copper, zinc, gold, and talc in metasediments west of

Buckwheat Wash; perlite in volcanics north of Sheephead Pass, in the Dublin Hills, and also possibly west of Buckwheat Wash. There may be gold in the alluvium of Buckwheat and Confidence Washes.

The American mine, southwest of Ibex Peak, and the Rusty Pick, west of Buckwheat Wash, produced copper, silver, lead, and gold. There was also gold at the Confidence Mine, so Buckwheat and Confidence Washes have potential for placer gold. Pre-Cambrian and Cambrian metasediments in the Dublin Hills carry lead, silver, copper, and gold in many nearby ranges, so the potential for such mineralization exists here, too. Perlite occurs on Sheephead Mountain and may occur near the junction of the two washes mentioned above. Perlite horizons are present throughout the western Dublin Hills and part of the deposit is covered by 14 active claims. There are deposits of talc, another strategic mineral west of Buckwheat Wash. At the western end of Sheephead Pass a number of geologic indicators, including fault intersections and thorium and potassium anomalies, suggest a favorable environment for mineralization. The alluvial area northeast of Sheephead Mountain is prospectively valuable for sodium. This area is rated prospectively valuable for geothermal resources. The area has relatively little potential for locatable minerals.

Vegetation

No unusual plant assemblages occur within WSA 149. Vegetation within the WSA is similar to WSA 147.

Wildlife

Wilderness Study Area 149 includes 36 square miles of transient bighorn sheep range, which is declining in use. The Black Mountains bighorn sheep population has 110 animals, but the WSA includes only the southern one-fifth of the range. This includes approximately 3 percent of the permanent range and 50 percent of the transient range used by this herd. Most of the Black Mountains are in Death Valley National Monument. This WSA has at least two springs that are important to wildlife.

Cultural Resources

One area of high cultural resource sensitivity (8 sq. mi.) is located within the area.

Native American Uses, Needs, and Sites

This area represents traditionally used lands of the Panamint Shoshone and Chemehuevi. Village sites are documented for the eastern slope of the most extreme southern Greenwater Range; the old village site of Shoshone exists in the Dublin Hills, in the northeast portion of the area. These same areas were used for collection by these same groups. In fact, a trail with a talc, sumac, and Datura meteloidas collection site passes through the center of the area in an east-to-west direction.

Scenic Quality

The overall scenic quality of this study area is "high". Although the study area encompasses portions of three scenic quality polygons, it is dominated by the Ibex Hills, which received a high score for uniqueness, high-medium scores for landform and color, and a low score for vegetation. Sheephead Mountain, spires, and colorful rock strata accounted for the high uniqueness rating. The other two polygons were rated medium for scenic quality.

General Recreation

This area contains a fair rockhounding area.

Range Uses and Potential

No range resources are known to exist in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments included recognition of the wilderness qualities and the presence of mining areas. Mining areas noted in the comments have been excluded from the Wilderness Study Area boundaries.

Study Phase

Of the 26 letters received on WSA 149, 14 opposed wilderness designation for the area. Many sites and sounds were listed as detracting from wilderness. These were a microwave station, roads, a talc mine at Ibex Hills, developments adjacent to Shoshone, and motorized vehicle use. Mining was a common concern. Potential for gold, silver, copper were specifically discussed.

Letters supporting wilderness designation were divided on how to handle mining in area. Some wanted to rehabilitate the mines and include them in the wilderness areas. Others wanted to exclude mines from the area, specifically the Ibex Hill talc mine. Contiguity to Death Valley National Monument, many felt, was an enhancement to wilderness management. Scenic and research qualities were mentioned, and one letter urged protection of Salberry and Sheephead Spring riparian habitats. Another feld wilderness designation for this area would "protect it from man's further encroachment."

Three comments were received in response to the workbook. Two comments were in favor of boundary changes that would reduce the size of the WSA and in favor of the recognition of roads to mining claims. The third comment concurred with BLM findings.

Draft Plan Alternatives

The following range of public comments specific to WSA 149 was received in response to the Draft Desert Plan. Some desired that lands on both sides of Highway 127 and/or greater acreage of nonmountainous terrain as suitable for wilderness under the Protection Alternative; another desired that the entire study area be recommended as suitable for wilderness under the Balanced Alternative. In addition, it was expressed that the exploration and development of minerals, oil, gas, and geothermal resources were the best uses for the area.

SUMMARY OF RATIONALE FOR THE PROPOSED ACTION

The Ibex Hills Wilderness Study Area (149) is recommended as nonsuitable for wilderness designation.

The area has historically been a high producer of minerals. Known deposits of a large number of minerals are scattered throughout the WSA. A high potential exists for other minerals, and the area has been rated as prospectively valuable for geothermal resources.

The WSA includes 36 square miles of transient desert bighorn sheep range and two springs that are significant for wildlife. Also, one area of high cultural resource sensitivity is located here, and the entire WSA has traditionally been used by Native Americans.

Considering relative resource values, this WSA was ranked in the lower half (73). In spite of the fact that the area met one of the general desert-wide objectives, adjoining wilderness, it was decided that its high mineral values were of greater significance than its wilderness values.

The area is recommended for Class M (approximately 80 percent) and Class I. The Class M designation would provide a degree of protection to resources while permitting increased access for recreation and mineral exploration and development. The Class I designation acknowledges existing and potential mineral development.

IMPACT OF PROPOSED PLAN

Approximately 90 percent of the area is recommended for Class M. Mineral exploration and development in the scale permitted under this category would significantly impact both the wilderness and scenic values in the area. The flat valleys and bajadas are the most susceptible to degradation, but even the more rugged hills would be adversely impacted. Permitting motorized vehicle use on both designated and identified routes would further reduce the naturalness of the area. All wilderness values in the Ibex Hill areas would be lost in the Class I designated lands.

WILDERNESS STUDY AREA 149A

Ibex Spring

GENERAL DESCRIPTION

This WSA[1] of 1,800 acres is bordered on the east by a wood pole utility line right of way paralleling State Route 127, on the south by a maintained dirt road to the Ibex Springs area, on the west by Death Valley National Monument, and on the north by a maintained road to the Giant Mine and radio tower road. The area contains 40 percent hills, 40 percent highly dissected fans, 10 percent dissected fans, and 10 percent alluvial fans.

WILDERNESS QUALITY

Description of Environment

The area contains hills in the majority of the area, ranging in elevation from 1,210 feet up to 2,180 feet. Creosote-covered bajadas can be seen in the southeastern and northern portions.

Natural Condition

This area has been affected primarily by natural forces with man's imprint substantially unnoticeable.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

This area provides outstanding opportunities for solitude because of its primitive character, the adjacent Death Valley National Monument administratively endorsed wilderness area, and topographical variation which screens visitors from one another. These characteristics also provide many outstanding opportunities for a primitive and unconfined type of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 74 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

This WSA has medium potential for geothermal energy and is topographically favorable for generating plant siting. The WSA also has speculative

[1]Portions of T 19-1/2 N., R. 6 E. and T. 20 N., R. 6 E., MDM.

potential for radioactive mineral deposits. The area has relatively little potential for locatable metallic and non-metallic deposits.

Vegetation

No unusual plant assemblages occur within WSA 149A. Vegetation within the WSA consists mostly of creosote bush scrub. No sensitive plant species are known to occur within this WSA.

Wildlife

Wilderness Study Area 149A contains hills in the majority of the area, ranging in elevation from 1,210 feet up to 2,180 feet. Creosote-covered bajadas can be seen in the southeastern and northern portions. This area has not been inventoried for wildlife. Future inventories may identify values currently unknown.

Cultural Resources

No known areas of cultural resource sensitivity have been located within this Wilderness Study Area, as no portion of the area has been systematically surveyed. Three archaeological sites per square mile are predicted to occur within the entire area based on surveys in similar areas undertaken by BLM contractors.

Native American Uses, Needs, and Sites

The Monarch Mountain area has been traditionally occupied by the Panamint Shoshone. Although specific resource data on the area are sparse, regional use includes seasonal collection of annuals and some hunting activities (deer and small game).

Scenic Quality

Overall scenic quality of this area is rated "low". It received low scores for landform and vegetation and medium scores for color and uniqueness.

General Recreation

There are no known recreation resources in this WSA.

Range

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments stated that the area met the Wilderness Act criteria and should be designated for further wilderness study. Rechecks in the field supported this view.

Study Phase

Only two letters were received on WSA 149A. Both favored wilderness designation because of its contiguity to the Death Valley National Monument. They also felt corridors should be designated where appropriate.

One response was received from Death Valley National Monument in response to the workbook. The letter defined the area as a desirable extension of Death Valley Wilderness.

Draft Plan Alternatives

The following range of public comments specific to WSA 149A was received in response to the Draft Desert Plan. One was in agreement with the Use Alternative, another wanted both sides of State Route 127 recommended as suitable for wilderness in addition to the recommendations of the Protection Alternative. A third comment was that mining was the best use for the study area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Ibex Spring Wilderness Study Area, 149A, is recommended as nonsuitable for wilderness designation.

With the exception of the fact that this WSA shares a boundary with an administratively endorsed wilderness area, the area is lacking in the values defined as desert-wide wilderness objectives. The area ranked in the lower half of the areas studied. It was determined that the potential for geothermal energy, in addition to the favorable setting, was of greater value than the area's wilderness value.

Considering a general absence of cultural and natural resource values, it was recommended that the site be designated as Class M to permit access for geologic, energy, and minerals exploration and development.

IMPACT OF PROPOSED PLAN

Due to its relatively small size and Class M designation, significant adverse impacts can be expected in the form of mineral development and motor vehicle use. These impacts would be visible throughout the area.

WILDERNESS STUDY AREA 150

Nopah Range

GENERAL DESCRIPTION

The area (121,900 acres)[1] is bounded on the north by State Route 178, on the west by State Route 127, on the south by Tecopa Hot Springs cutoff and the Old Spanish Trail Highway, and on the east by the California/Nevada border. The area is predominantly public lands with approximately 10 percent non-public lands in random scattered parcels. There are two areas within the WSA that are withdrawn for public water reserve purposes. They are 160 acres in Sections 11 and 14, T. 21 N., R. 7 E., and Sections 17, 18, 19, and 20 (all), T. 22 N., R. 8 E., S.B.M. They were withdrawn by Executive Orders of August 8, 1914, and December 1, 1913, for Public Water Reserves 22 and 13, respectively. There are a number of recorded mining claims along the west and southwest edges of the WSA. This WSA contains 35 percent mountains, 30 percent alluvial fans, 10 percent dissected fans, 5 percent badlands, 5 percent playas, 5 percent plains, 5 percent riverwashes, 3 percent highly dissected fans, and 2 percent hills.

WILDERNESS QUALITY

Description of Environment

This area is dominated by the southern portion of the Resting Springs Range, Chicago Valley, and the north-central portion of the Nopah Range. Both ranges are rugged and folded. Yellow, red, and brown colored striations occur throughout the upper elevations of the Nopah Range. Grayish-brown bajadas surround the mountains and appear as a low, moderate slope. Chicago Valley is predominantly flat, with many winding, light-colored washes throughout its lower drainage. The vegetation cover is varied but sparse. The mountains appear barren, with a few dwarfed creosote and other desert shrub and grass species. The surrounding bajadas and valley have more vegetative cover, basically composed of creosote, cacti, yucca, and other desert shrub species, such as desert willow, mesquite, and catclaw species. The lower drainage vegetation appears dark green in contrast to the surrounding light gray-green vegetation on the surrounding bajadas and the sparse barren appearance of the mountains.

Natural Condition

This area has retained its primeval character and generally appears to have been affected primarily by natural forces, with man's imprint substantially

[1]Portions of T. 21 N., Rs. 7, 8, and 9 E.; T. 22 N., R. 9 E.; T. 22 N., Rs. 7, 8, and 9 E.; T. 23 N., Rs. 7, 8, and 9 E.; and T. 24 N., R. 8 E., MDM.

unnoticeable. The few man-made structures that do exist, such as the houses and roads along the northern border in Chicago Valley (in Sec. 23, 24, 25, and 36, T. 22 N., R. 7 E.), and the roads and ways affecting the general natural condition of the landscape at the southern end of the Resting Spring Range east of Tecopa Hot Springs (all Sec. 20, 21, 22, 26, 27, 28, 29, 33, 34, 35, and 36, T. 21 N., R. 7 E.; Sec. 2 and 3, T. 20 N., R. 7 E; portions of Sec. 23, 25, 30, 31, and 32, T. 21 N., R. 8 E.; portions of Sec. 1, T. 20 N., R. 7 E.) have been excluded from the Wilderness Study Area. The western boundary of the WSA runs north from Tecopa Hot Springs through a wash in Sections 28, 21, 20, 17 (T. 21 N., R. 7 E) joining the way to Chappa Spring in Section 8 and continuing north to Highway 178.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

This area contains outstanding opportunities for solitude as the variation in topography screens potential visitors from man's works. The rugged, folded topography of the mountains provides isolated and secluded canyons where outstanding opportunities for solitude can be found. The Chicago Valley is isolated from outside influences, also contributing to outstanding opportunities for solitude. This area also contains outstanding opportunities for primitive and unconfined types of recreation.

WILDERNESS STUDY AREA RANKING

This WSA was ranked 17 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

This WSA contains occurrences of metallic and locatable industrial minerals and geologically favorable environments for saline and radioactive minerals, geothermal energy, oil and gas, and salable materials.

The Nopah mine in the northern part of the Nopah Range shipped high-grade lead-silver-zinc ore in the 1940s. Silver content of this ore averaged 17 ounces per ton. Mines at the southern end of the range (in WSA 150A) were major producers of lead, silver, and zinc. All of the deposits in the range occur in curved faults in dolomite of various ages (Pre-Cambrian to Mississippian). This favorable environment extends from the producers in the southern Nopahs through the WSA to the Nopah mine in the north. Silver, lead, and zinc are all strategic commodities, and exploration for them is quite probable in this area.

The California Division of Mines and Geology has identified potential sources of limestone and silica in the Paleozoic sedimentary rocks of the northern Nopah Range. There is excellent potential for limestone, silica, and dolomite in the rest of this range. These commodities are used in the chemical, agricultural, electrical, metallurgical, and construction industries.

Anaconda is currently exploring a zeolite deposit on 16 lode and 18 placer claims between Chappo Spring and Tecopa Hot Springs. The claims have barely been excluded from the WSA. The deposit continues north and east into the WSA. Zeolites are independently reported from this area by the U.S.G.S. (Sheppard and Guide, 1968, USGS Prof. Paper 597). The volcanogenic sediments between Shoshone and the Resting Spring Range and east of the range have potential for borates and bentonite as well as zeolites. Borates, which are used in high-temperature glasses and fire retardants, are relatively scarce on the world market and the U.S. produces more than 50 percent of the free world's supply of these minerals. Bentonite is used in the steel industry and as drilling mud.

According to classifications by the USGS, there is high potential for sodium mineralization in Stewart, Pahrump, and Chicago Valleys. Between the western flanks of the Resting Springs Range and the western WSA boundary, the U.S.G.S. has classified the area as a potential source of sodium and potassium. The U.S.G.S. considers the area from the southern half of T. 22 N, Rs. 7 and 8 E. to the southern border of the WSA (and beyond) as potentially valuable for geothermal resources (PGRA), and the Pahrump Valley is prospectively valuable for oil and gas. Sand and gravel resources are also present in this WSA.

Vegetation

No unusual plant assemblages occur within this WSA. Vegetation within WSA 150 consists of three major types: creosote bush scrub, allscale scrub, and blackbrush scrub. At the north end of the Nopah Range there occur two rare species -- Eriogonium contiguum and E. bifurcatum. Scattered throughout the Nopahs is the rare agave, Agave utahensis var. ebonispina.

Wildlife

Vegetation is sparse. Mountain areas appear barren but grasses, creosote, and other desert shrub and grass species are present. The bajadas and valley have habitats composed of creosote, cacti, yucca, and other desert shrubs. The lower wash of Chicago Valley provides riparian habitat characterized by desert willow, mesquite, and catclaw species. Approximately 60 percent of the mesquite woodland and associated vegetation present in Chicago Valley are located within the WSA. This plant association contains much greater wildlife species diversity than surrounding habitat types.

The WSA includes 50 square miles of permanent bighorn sheep habitat as well as 5 square miles of transient range in the southern end of the WSA. Bighorn habitat within WSA 150 falls into two distinct and separate categories: the Resting Springs Range, consisting entirely of bighorn sheep transient range; and the Nopah Range, containing an estimated sheep population of 10 individuals. The entire Nopah Range bighorn sheep herd is located within WSA 150.

There are 65 square miles of prairie falcon foraging habitat and 85 square miles of golden eagle foraging habitat. One prairie falcon eyrie and one

golden eagle eyrie occur within the WSA. Over 20 square miles of desert tortoise habitat, with densities of 20 to 50 animals per square mile, exist in the area. One unique habitat, Chicago Valley mesquite woodland, occurs on 8 square miles. Eight springs occur in the WSA.

Cultural Resources

Two areas of cultural resource sensitivity are located within this Wilderness Study Area.

Native American Uses, Needs, and Sites

This area has been traditionally used by the Panamint Shoshone, Southern Ute, River Chemehuevi, Southern Chemehuevi, and Mohave. The lowland or valley areas, such as the Chicago and Stewart Valleys, were used for seasonal collection. A Panamint Shonshone and Southern Ute collection area has been reported in a contemporary context for the south-central portion of the WSA. A Panamint Shoshone village site is likewise reported for the extreme eastern portion of the WSA where a trail is noted to exist.

Scenic Quality

This study area has an overall scenic quality rating of medium. The area consists of portions of five scenic quality polygons, with scenic quality ratings spanning the range from low to high. The Nopah Range and Chicago Valley represent the two dominant landscape features. The Nopah Range, which was rated high overall, received a high landform score and medium scores for color, vegetation, and uniqueness; Chicago Valley, which rated moderate overall, received a low landform score and medium scores for color, vegetation, and uniqueness. The Tecopa Badlands, in the western portion of the study area, add landform diversity to the scenery. Views of the surrounding scenic mountains and valleys enhance the overall visual quality of the area.

General Recreation

Both interpretive sites in this WSA are unevaluated. They are Emigrant Pass and Tecopa Lake beds. One teaching and research site in this WSA receives up to four visits annually from college and university classes.

Range Uses and Potential

This WSA contains portions of the Pahrump Valley Allotment (which is grandfathered) and the proposed Tecopa Allotment (which is not grandfathered). A small portion of Horsethief Springs Allotment is in the WSA. Horsethief Springs allotment is grandfathered. The Chicago Valley Herd Management Area is in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments on file addressed the mineral potential of the area. Others agreed with the findings in the narrative.

Study Phase

Of 25 comments received on WSA 150, 13 favored wilderness designation. The primary issues in these were scenic quality and the opportunity for primitive recreation. The Pahrump and Nopah Peaks were noted as prime areas for desert peak climbers. Another letter felt both the valley and range can be fully appreciated in relatively short traverses. The wildlife in the area was also frequently mentioned. Tarantulas, hawks, deer, striped whipsnake, Mojave patch-nosed snake, zebra-tailed lizard, and red racer were listed for protection in these letters. The vegetation near springs and barrel cacti were also noted as unique in the area. One letter spoke of protection needed for a cabin built from hand-hewn logs. Geographic and educational values were mentioned. Two boundary alterations were suggested. One was to exclude the southern part of the Nopah Range for mining and roads. The other suggested limiting the Chicago Valley exclusion. One letter in favor of wilderness designation felt the road between State Route 127 and 178 should be opened.

The letters opposing wilderness designation were mostly concerned with existing mines and potential mineral development. Borates, saline materials, and geothermal potential were discussed. Sites and sounds from motorized vehicle use, mines, roads, vehicle noise, and nearby community activity were listed as detracting from the area's wilderness quality that makes primitive recreation impossible. One commented that "all its scenic beauty can be appreciated from the road."

Two public comments were received in response to the workbook. One commenter felt the area should become wilderness to protect rare and relatively rare plant species. The second commenter urged reducing the WSA size by moving the boundaries awary from highways.

Draft Plan Alternatives

A variety of public comments specific to WSA 150 was received in response to the Draft Desert Plan. For example, one indicated complete agreement with the Protection Alternative, another agreed with the Use Alternative, while a third insisted that greater acreage be recommended as suitable for wilderness than in the Protection Alternative. Another called for the entire study area being recommended as Class M and designated an Area of Critical Environmental Concern instead of as suitable for wilderness in the Balance Alternative. In contrast, it was suggested that the entire study area be recommended as suitable for wilderness. In addition, mining for zeolite is the best use for the study area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Approximately 80 percent of Wilderness Study Area 150, Nopah Range, is recommended as suitable for wilderness designation. The remaining area is recommended for Class L designation. Its value as a wilderness resource is reflected in its high wilderness rating. The site has a history of silver, lead, and zinc production and potential for other minerals, which was recognized by both the California Division of Mines and Geology and the USGS. Considering these and the other resource values present, it was decided that its wilderness resource values exceeded those of the mineral resource.

Portions of Pahrump and Chicago Valleys were recommended for Class L to allow limited development and increased recreation use. This designation would protect the prairie falcon and golden eagle foraging areas and the desert tortoise habitat.

IMPACTS OF PROPOSED PLAN

The L designation is primarily on flat land and bajada and as such it is vulnerable to impacts. Most activities permitted by the guidelines would degrade the values. Wilderness values would be preserved in the Class C portion.

WILDERNESS STUDY AREA 150A

South Nopah Range

GENERAL DESCRIPTION

The area (14,060 acres)[1] is bounded on the north by the Old Spanish Trail Highway, on the west and south by Tecopa Springs Pass, State Route 127, and on the east by the well-maintained Mesquite Valley Road. This area is predominantly public lands with approximately 2 percent in random blocks of non-public lands. There is one recorded mining claim in the north central portion. This WSA contains 40 percent mountains, 30 percent alluvial fans, 10 percent hills, 10 percent plains, 5 percent badlands, and 5 percent dissected fans.

WILDERNESS QUALITY

Description of Environment

The dominating feature of this area is the southern portion of the Nopah Range. The range is rugged and folded with color striations throughout. The western bajada and valley of the Nopah Range comprise a moderately low, rolling slope that appears light gray-brown, becoming lighter toward the valley floor. The vegetation varies with terrain and elevation. The mountain vegetation is very sparse, consisting of creosote and a few other desert shrub and grass species. The western bajada and valley of this range are also sparsely vegetated with predominantly light green creosote, cacti, and other desert shrub and grass species. The valley drainage is dominated by dark green mesquite and catclaw.

Natural Condition

This area has retained its primeval condition and generally appears to have been affected primarily by natural forces, with man's imprint substantially unnoticeable. The natural area appears to be used for livestock grazing. The substantially noticeable works of man in the southern portion of the area, an extensive active open-pit mine has been excluded from further wilderness consideration. The southern boundary is now a line running from east to west over the mountain ridges, excluding the patented Gunsight mining claim at Section 9 (T. 20 N., R. 8 E.). The mountain screens the natural area from the extensive mining activity to the south.

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[1]Portions of T.21 N., Rs. 7, 8 and 9 E.; and T. 22 N., Rs. 8 and 9 E., SBM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

This area contains outstanding opportunities for solitude. The variation in mountain topography substantially screens any outside influences and includes isolated and secluded canyons. The western bajada and valley also contain features that provide outstanding opportunities for solitude, due to the vast distances, isolated washes, and vegetative types that substantially screen users from one another. The area contains outstanding opportunities for a primitive and unconfined type of recreation. The rugged mountains provide excellent opportunities for unconfined freedom of movement. The western valley and bajada also provide outstanding opportunities for a primitive and unconfined type of recreation due to the vast distances, unique surrounding terrain, and vistas.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 128 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

The boundaries of this WSA have barely excluded the Tecopa (Shoshone) Mining District. This area produced $54 million worth of gold, silver, lead, copper, and zinc. Although the past producers have been excluded, the mineralized units continue into the WSA. The highest potential for lead, silver, and zinc is in the Noonday Dolomite which outcrops in Sections 4 and 9, T. 20 N., R 8 E. Copper may occur in Pre-Cambrian and Cambrian metasediments east and west of the Noonday outcrops. The carbonate members of the Cambrian formations have been identified by the California Division of Mines and Geology (Bulletin 194) as having potential for economic deposits of limestone and dolomite. There is also potential for talc in the western rocky parts of the WSA. Similar units have hosted talc near Tecopa Pass and in other ranges to the south and to the west.

The western alluvial parts of the WSA have been classified by the USGS as prospectively valuable for sodium and geothermal energy. There is also potential for borates near Resting Spring. The USGS has rated the eastern alluvial area as favorable for oil and gas. This may be part of the Overthrust Belt from which oil and gas have been produced in adjacent states. There is potential for radioactive mineralization in the older alluvium at the east end of Emigrant Pass.

There are two invertebrate fossil sites within this WSA.

Vegetation

No unusual plant assemblages occur within WSA 150A. Vegetation consists of three major types: creosote bush scrub, allscale scrub, and blackbrush

scrub. Only one rare plant species is present within this WSA--Agave utahensis var. ebonispina.

Wildlife

The Chicago Valley mesquite woodland and associated vegetation contains much greater faunal diversity than surrounding habitats. Approximately 15 percent of this vegetation association is present within WSA 150A. Prairie falcons forage over most of the lowlands.

Cultural Resources

One area of high cultural resource sensitivity, 3 square miles in extent, is located within this Wilderness Study Area.

Native American Uses, Needs, and Sites

This area has been of traditional use by the Panimint Shoshone, Southern Ute, River Chemehuevi, Southern Chemehuevi, and Mohave. The most southern extension of the Chicago Valley and western California Valley were used for seasonal collection. Permanent village sites exist along the western slope of the southern most extension of the Nopah Range.

Scenic Quality

This area has an overall scenic quality rating of high-medium. It is dominated by the Nopah Range, which received a high score for landform and medium scores for color, vegetation, and uniqueness. Views of the scenic valleys on each side of the range enhance the scenic quality.

General Recreation

The three interpretive sites in this WSA are unevaluated. These sites are Greensight mine, Noonday mine, and Resting Springs. No other recreational resources are known to occur in this WSA.

Range Uses and Potential

This WSA includes a portion of the proposed Tecopa Allotment. The allotment is not grandfathered.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments received referred to mineral potential and also detailed the wilderness qualities present.

Study Phase

Nine comments were received on WSA 150A. Six letters opposed wilderness designation for reasons of mining, sights and sounds, and motorized vehicle use. The mining potential for lead, silver, gold, and zinc was discussed. One letter felt the wilderness question should ignore the talc mines, as "it is small and meaningless." The sights and sounds listed as detracting from wilderness potential were mining, trucks on the highway, the town of Tecopa, and the Naval Weapons Center. One letter urged leaving the area open to motorized vehicles because the area is "very beautiful and accessible."

The letters favoring wilderness designation mentioned scenic quality and protection of wildlife. Two spoke of the opportunity to consolidate WSAs 148, 149, and 150 into one vast wilderness area.

One public comment was received in response to the workbook -- an access route to a scientific/geological area should be maintained. Education and science should have precedence over wilderness.

Draft Plan Alternatives

A variety of public comments specific to WSA 150A was received in response to the Draft Desert Plan. For example, one indicated agreement with the Protection Alternative, another agreed with the Use Alternative, while a third called for a general expansion in the acreage recommended as suitable for wilderness in the Protection Alternative. Another suggested that the entire study area be recommended as Class M and designated an Area of Critical Environmental Concern. In addition, mining for zeolite is the best use for the area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 150A, South Nopah Range, is recommended as nonsuitable for wilderness designation. Generally, the area's wilderness values are low, as indicated by its very low relative ranking. The area is historically a large producer of minerals, such as gold, silver, lead, copper, and zinc. The past history and future potential, as recognized by the California Division of Mines and Geology and the USGS were factors in the final status determination. Generally, the site lacks the values identified as desert-wide wilderness objectives.

The area is recommended for Class L (western portion) and Class M (eastern portion) designation. Class L designation would permit development of geothermal resources in the west and still protect the natural and cultural values present. This would also allow broader recreation and grazing opportunities. The Class M designation in the eastern part would provide for increased mineral exploration and development in an area of known mineralization. The USGS has rated the eastern alluvial area as favorable for oil and gas.

IMPACT OF PROPOSED PLAN

Activities permitted by the guidelines in these classes (L and M) will result in significant adverse impacts. The bajada area, which is the most vulnerable to impacts, would lose all wilderness and scenic values. Impacts to the more rugged portions could be less severe as they are more easily concealed from view.

WILDERNESS STUDY AREA 154

Pahrump Valley

GENERAL DESCRIPTION

The north and eastern boundary of this area (19,700 acres)[1] is the old traction road and jeep road traversing the area. The western boundary proceeds from the intersection of this road in the northeast Section 27, T. 21 N., R. 10 E SBM, then southwesterly up a wash to the Horse Thief Springs Road, then south to a short road leading to a water tank, and then south again to the San Bernardino-Inyo County Line. This forms the boundary for approximately 3 miles. The boundary of the area then parallels the Jupiter mine road eastward to its conjunctions with the old traction road. The area is predominantly public land with 11 percent being non-public in a few blocks scattered throughout. There have been a number of recorded mining claims in the southern portion of the study area. This WSA contains 55 percent hills, 30 percent alluvial fans, 8 percent dissected fans, 5 percent highly dissected fans, and 2 percent pediments.

WILDERNESS QUALITY

Description of Environment

This area includes a northern portion of the Kingston Range and portions of California Valley, Mesquite Valley, and Pahrump Valley. The Kingston Range is rugged, with many canyons. The east and north-facing bajadas of the range have moderate slopes, with many winding washes. Vegetation is composed of grasses, yucca, cacti, Joshua trees, and mixed desert shrub species. The valleys are predominantly desert shrubs.

Natural Condition

Man's influence is substantially noticeable within many portions of this roadless area. The northern portion surrounds the land development in Pahrump Valley. This area also includes the Old Fraction Road Jeep Trail and other roads and ways. The northwestern area possesses many old mines and associated ways. The southern portion of the area includes a landing strip, a watering tank and maintenance road, extensive talc mining operations, the Blackwater, Pioneer, Excelsior,and the Snow White mines with associated roads, and a primitive road to the patented Jupiter mine. The southeast and eastern portions of the area contain agricultural developments in Mesquite Valley. The interior sections of this roadless area are affected primarily by natural forces, with man's work substantially unnoticeable. This natural area is defined by: the Old Tractor Road Jeep Trail on the north and east,

[1]Portions of Ts. 19, 20, and 21 N., Rs. 10, 11, and 12 E., SBM.

from the northeast corner of Section 27, (T. 21 S., R. 10 E), south to the Jupiter Mine Road; the Jupiter Mine Road west to the southeast corner of Section 30 30, (T. 20 N., R. 11 E.); a straight line due west of the northeast corner of Section 30, to the graded dirt road north of Horsethief Springs; the roadless area boundary to the northeast quarter of Section 8, (T. 20 N., R. 10 E.); then northeast along a wash to the beginning at the Old Traction Road Jeep Trail, Section 27 (T. 21 S., R. 10 E). A jeep trail in a wash enters the area from the south for 2 miles to a few old abandoned prospects but has no significant effect upon the naturalness of this large natural area. The southern end of the area, which contains patented mining claims, does not meet the Wilderness Act criteria and is therefore excluded from further wilderness consideration.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Because of winding washes and the rugged topography, the interior area contains outstanding opportunities for solitude or a primitive and unconfined type of recreation, despite the peripheral structures.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 101 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has possible potential for talc in the southern part and for sodium, oil, and gas along the north and east edges. There is an active talc mine adjacent to the southern margin. Six unpatented claims are recorded.

Vegetation

No unusual plant assemblages occur within WSA 154. Vegetation within the WSA consists mostly of creosote bush scrub and blackbrush scrub. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

This WSA covers a broad area in the Eastern Mojave Desert, encompassing the northern Kingston Range, and portions of California Valley, Mesquite Valley,

and Pahrump Valley. Vegetation consists primarily of creosote bush scrub, with yucca, cacti, Joshua trees, and other shrubs. This portion of the desert has not been intensively inventoried. The WSA is known to contain approximately 15 square miles of golden eagle foraging area, used by a nesting pair of birds in the northern Kingston Mountains. Future studies may demonstrate the presence of additional raptors or other important wildlife species.

Cultural Resources

No known areas of cultural resource sensitivity have been located within this Wilderness Study Area, because no portion of the area has been systematically surveyed. Approximately three archaeological sites per square mile are predicted to occur within the entire area.

Native American Uses, Needs, and Sites

This WSA represents traditional territories of the Panamint Shoshone, Southern Ute, River Chemehuevi, Southern Chemehuevi, and Mojave. Anticipated resources would occur in the valley areas of the WSA, such as the lower Pahrump and eastern California Valleys.

Scenic Quality

The overall scenic quality rating for this study area is "low". The area primarily contains portions of two scenic quality polygons. The North Kingston Mountains, which dominate the scenery, received low-medium scores for all key factors, while the Pahrump Valley section received low scores for landform, color, and uniqueness and a medium score for vegetation. Views of the nearby Kingston Mountains somewhat enhance the scenic quality of the area.

General Recreation

One teaching and research site is in this WSA and is visited up to four times a year by college and university classes. Along the southwest tip of this WSA are good deer hunting opportunities.

Range Uses and Potential

The WSA takes in a small portion of the Pahrump Valley Allotment and a portion of Horsethief Springs Allotment. Both are grandfathered.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

The majority of comments supported the findings that portions of the area had been unaffected by permanent structures.

Study Phase

Of 28 comments received on WSA 154, 22 supported wilderness designation. Most letters in favor of wilderness felt the area fits wilderness qualities of solitude and provides primitive recreation opportunities such as hiking, riding, hunting, and nature study. But exclusions of mining in the south and developments in the north were often suggested. A few, however, requested inclusion of the northern Tecopa exclusion. Unique flora and fauna (white fir forest and Tecopa Lakebed habitat) were specifically mentioned for protection. The areas's contiguity to large public land holdings in Nevada was a factor many felt heightened the area's wilderness potential.

The letters opposing wilderness designation were concerned over access and mineral production. Talc mining and its access road were discussed. Grazing concerns were also noted. Sites of mines, roads, and motorized vehicle activity were mentioned as detracting from the area's wilderness potential.

Four comments were received in response to the workbook. Two comments requested a change in the WSA's boundaries to permit continued mining. One comment felt the area's ecological values needed protection from wilderness designation so that access for scientific and ecological studies could continue. A fourth comment urged that the area receive wilderness classification to protect the area's ecological values.

Draft PLan Alternatives

A public comment, specific to WSA 154, was received in response to the Draft Desert Plan. It requested that the entire study area be recommended as suitable for wilderness under the Balanced Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Pahrump Valley Wilderness Study Area (154) is recommended as nonsuitable for wilderness designation.

The area has potential for minerals in the south and for sodium, oil, and gas in the north and east. Active talc operations border the southern edge. Portions of two grandfathered grazing allotments, Horsethief Springs and Pahrump Valley, are supported within the boundaries. Since the WSA ranked quite low and does not possess any values supporting the desert-wide wilderness objectives, it was determined that the area's value in terms of mineral and/or energy development was of greater value than its wilderness value.

The Class M designation would insure access for mineral exploration and development and allow more intense motorized vehicular use.

IMPACT OF PROPOSED PLAN

The WSA is recommended for Class M. Activities permitted by the guidelines would significantly impact both the wilderness and scenic values. The most

vulnerable portions of the WSA are located on the bajada and the flat areas, but even the hills in the area could not absorb extensive mining, grazing, and motorized vehicle use without degrading the wilderness qualities and scenic values.

WILDERNESS STUDY AREA 156

Owlshead Mountains

GENERAL DESCRIPTION

The area (121,100 acres)[1] is bounded to the north and east by the Death Valley National Monument, to the south and west by Fort Irwin Military Base, and to the southeast by a portion of radio relay tower access road. The area is 94 percent public lands. Non-public land sections occur at the rate of two per township throughout. Executive Order of August 8, 1914, withdrew, for public purpose as a public water reserve, NW 1/4, Section 23, T. 18 N., R. 3 E., SBM.

There are a number of recorded mining claims on the very southwestern border of the area. This WSA contains 60 percent mountains, 20 percent alluvial fans, 7 percent dissected fans, 5 percent badlands, 2 percent playas, 2 percent plains, and 1 percent hills.

WILDERNESS QUALITY

Description of Environment

The area is characterized by rugged mountains which border two interior valleys, each of which contains a dry lake. The mountains take the form of three north-south trending ranges that converge to the north of the roadless area. The ranges to the east and west appear metamorphic in nature, while the middle range shows a volcanic influence. Bajadas are heavily vegetated with creosote; however, the vegetation thins out higher on the slopes and in the mountains. The dry lake beds are devoid of vegetation.

Natural Condition

This area is largely undistrubed by man and affected primarily by natural forces. Only a few man-made developments exist within the area. These include the abandoned New Deal and Black Magic mines. A few old structures, roads, and mine shafts remain at the sites, all of which have been excluded from further wilderness consideration. These have only local impact because of screening by topographic barriers in the mountains. The microwave repeater and its access road also penetrate the area, but these features do not noticeably detract from the primeval character of the land because of its large size and diversity of landforms. On either side of the access road, beyond the old mill site at Owl Hole Springs, the area is entirely in a pristine state.

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[1]Portions of T. 18 N., Rs. 1, 2 and 3 E.; T. 18-1/2 N., R. 1 E.; T. 19 N., Rs. 1, 2 and 3 E.; and T. 20 N., Rs. 1, 2 and 3 E., SBM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The area provides outstanding opportunities for solitude or a primitive and unconfined type of recreation. Diversity of landforms and large size combine to create areas of isolation and seclusion, both in the mountains and in the valleys. The area allows freedom of unconfined movement. The adjacent administratively endorsed wilderness area in Death Valley National Monument and the unconfined character of the landscape further enhance these opportunities.

WILDERNESS STUDY AREA RANKING

This WSA was ranked 16 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

The geologic environment of the New Deal and Black Magic manganese mines extends into the southeastern part of the WSA. A manganese deposit is reported about 2 miles west of Owl Hole Spring. This area has high potential for manganese mineralization. Manganese is a strategic mineral necessary for steel manufacturing. The U.S. imported 98 percent of its manganese needs in 1979. Gold, silver, and copper are reported from the area around Quail Spring, where there are 10 mining claims. This area, which warrants field verification, has speculative potential for these commodities.

The areas of older alluvium at the flanks of the mountains, and gamma-ray uranium and thorium anomalies, have speculative potential for uranium and thorium.

Most of the western and southern parts of the WSA have medium to speculative potential for oil and gas.

Vegetation

No unusual plant assemblages occur within WSA 156. Vegetation consists mostly of creosote bush scrub. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

Wildlife inventories in this area are incomplete. There is one spring in the southeast corner of the WSA that has significant wildlife value.

Cultural Resources

One area of very high cultural resource sensitivity and one area of high sensitivity are located within this area.

Native American Uses, Needs, and Sites

This WSA is a traditional use area of the Panamint Shoshone and possibly Chemehuevi. The entire north-central border of the WSA is an area of Panamint Shoshone summer occupation; three major village sites are located there. A Panamint Shoshone chia and blazing star collection area exists in the west-central position of the WSA.

Scenic Quality

The overall scenic quality rating for this study area, which encompasses five scenic quality polygons, is "medium." The mountainous polygons each generally received medium scores for landform, color, and uniqueness and low scores for vegetation. The valley polygons received medium scores for color and uniqueness and low scores for landform and vegetation. The significant landscape feature within the study area is its general lack of visual intrusions.

General Recreation

Three unevaluated interpetive sites are within this WSA. They are Lost Dry Lake, New Deal Mine, and Owl Hole Springs.

A small portion of this WSA provides excellent chukar hunting opportunities. Good quail hunting exists throughout most of this WSA. Excellent rockhounding exists for sagenite, geodes, smokey quartz, beryl, and celestite. Rare sagenite agates of excellent quality are found here.

One large concentrated use zone covers most of this WSA. In 1978 approximately 3,953 visitor use days of recreation use were recorded in this WSA. Most of this use occurs along the microwave tower service road and the rock-collecting sites. Primary activities in this zone include sightseeing, rockhounding, motorized vehicle touring, and hobby prospecting.

Range Uses and Potential

This WSA contains burros.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

many comments expressed interest in motorized recreation in the area for camping and rockhounding. Other comments supported the findings. No changes were made as a direct result of comment.

Study Phase

Of 33 comments received on WSA 156, 15 opposed wilderness designation. Many opposition comments noted sights and sounds as detracting from the area's wilderness potential. These sights and sounds included mining activity,

roads, campsites, wreckage of aerial targets, low-flying aircraft, highways, fences, pipelines, private lands, signs, structures, motorized vehicle use, and a relay station.

Mineral potential, specifically in the Owlshead Mountains, was commonly noted. Several letters from rockhounds were received. They were concerned that limiting access would cut off Owl Hole Spring and Owlshead Mountain, both popular rockhound areas. These sites contain sagenite in agate, geodes, modules, agates, manganese, golden sagenite, quartz, opals, and chalcedony. One letter felt the area was too barren, just not worthy of wilderness designation. Others discussed the lack of water and distance from the nearest access road as making primitive recreation in this area an impossibility.

The letters favoring wilderness designation often mentioned the area's contiguity to the Death Valley National Monument as heightening wilderness management potential. Unique ecosystems were discussed in several letters. The Quail Spring riparian habitat was noted. One letter discussed the isolation of Owls dry lake and Black Magic mine areas, making protection of unique flora and fauna possible. The ecosystem runs from mountain to bajada to playa. One letter pointed out the possibility of preserving the entire valleys of two remote dry lakebeds without road access. Educational, geologic, historic, and scenic qualities of the area were mentioned. Several boundary alterations were suggested. One wished to exclude the microwave tower. Another suggested including the area's southeast corner and area south of the microwave station.

Two comments were received in response to the workbook. Both comments favored the area's designation as wilderness. One stated that the area was a logical topographic and ecologic extension of Death Valley's proposed wilderness area.

Draft Plan Alternatives

The following range of public comments specific to WSA 156 was received in response to the Draft Desert Plan. One favored the Use Alternative. A second comment requested that emergency vehicles be permitted to pass through the area after it is designated wilderness.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Owlshead Mountains Wilderness Study Area (156) is recommended as suitable for designation as wilderness.

Its relatively high rating and known wilderness quality were prime factors in the recommendation. As drawn, the WSA boundaries exclude the two mines and most of the known, popular rockhound sites. It was recognized that wilderness designation would impose limitations on some aspects of general recreation. The area meets many of the desert-wide wilderness objectives. In addition to its ranking, it borders on an administratively endorsed

wilderness area and exhibits a variety of typical desert land forms which could provide challenges to recreationists of all skill levels.

In view of the above, it was determined that the WSA's wilderness quality was of greater significance than either its mineral potential or existing recreation use.

IMPACT OF PROPOSED PLAN

With the exception of a small portion in the southeastern corner designated Class M, all wilderness values would be protected.

WILDERNESS STUDY AREA 157

Little Lake Canyon

GENERAL DESCRIPTION

The northern boundary of this area (25,200 acres)[1] is Tunawee Canyon and the southern boundary of Inyo National Forest. The eastern boundary is the Los Angeles Aqueduct western maintenance road. The southern boundary is Nine Mile Canyon Road, and the western boundary is the boundary of the CDCA. All this area is public land except for relatively small parcels along the mideastern boundary. The study area is embraced within two withdrawals: one, Secretarial Order of January 21, 1933, withdrew portions of the site for the purpose of a stock driveway and the second, Public Land Order 2594, withdrew portions of the area for the purposes of a National Cooperative Land and Wildlife Management Area. This WSA is entirely mountains.

WILDERNESS QUALITY

Description of Environment

The area adjoins the eastern portion of the Sierra Nevada. Topography includes valleys, canyons, alluvial fans, and steep hills that lead to the rugged, granite mountains. The valleys vary from relatively flat areas to rolling mounds and gullies within the canyons. There are several winding canyons that lead to the mountains. The major canyons include: Portuguese, Sacator, Little Lake, Five Mile, Deadfoot, and Nine Mile. The hills above the canyon floors are generally very steep and rocky. The vegetation is diversified. To the north, the valleys consist mostly of creosote, which grows to over 2 feet high. Further south, the creosote stands are more diversified as topography changes. There are some Joshua trees, Eriogonum, and desert shrubs. The southern valleys are narrow and mainly consist of low-growing desert shrubs with scattered portions of creosote. The vegetation within some of the canyons includes Joshua trees, creosote, desert shrubs, cottonwood trees, annual grasses, and some cacti. The steep hills accommodate desert shrubs, grasses, and some creosote. The higher elevations contain scattered portions of pinyon pine in the north. Eastward and further south, the vegetation is restricted mostly to grass and a few desert shrubs because of the rocky structure of the mountains.

Natural Condition

This area consists of undeveloped public land retaining its primeval character and influence. Man's imprint is substantially unnoticeable within

[1]Portions of T. 22 S., R. 36 E.; T. 23 S., Rs. 37 and 38 E.; and T. 24 S., Rs. 37 and 38 E., MDM.

the majority of this area. Those portions where the imprint of man's work is substantially noticeable have been excluded from the Wilderness Study Area. Portuguese Canyon Road is used by the permanent residents in the canyon. An extension of this road leads further west, for water pipeline maintenance. There are two other water pipeline maintenance roads west of Red Hill just off the Los Angeles Aqueduct western maintenance road. There is also a ranch northwest of Coso Junction that contains cattle fences, ways leading from ranch headquarters, and a few areas of old mining activity. The ways seriously detract from the naturalness of the ranch area.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Outstanding opportunities for solitude can be obtained because of size, the rugged topography, and high, winding canyons which help to create an atmosphere of solitude. The vegetation at the higher elevations also provides a buffer zone between visitors. Primitive and unconfined types of recreation are thus accommodated.

WILDERNESS STUDY AREA RANKING

This WSA was ranked 51 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change.

This WSA has possible potential for metals throughout and for geothermal resources on the eastern edge. No claims are recorded with BLM as of December 12, 1979. Claims may have been staked since that date.

Vegetation

No unusual plant assemblages occur within WSA 157. Vegetation within the WSA consists mostly of Utah juniper-one leaf pinyon woodland and blackbrush scrub. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

A diversity of habitats is provided by the ecotone between the Sierra Nevadas and the Mojave Desert flora and fauna. The area is excellent golden eagle and prairie falcon habitat, both for nesting and foraging. About 40 square miles of mule deer concentration areas exist in the numerous canyons.

Cultural Resources

Four areas of cultural resource sensitivity are located within this Wilderness Study Area. One highly sensitive area is 6 square miles.

Native American Uses, Needs, and Sites

This Wilderness Study Area is within the traditional homeland of the Kwaiisu. The Shoshone and Paiute of the Owens Valley probably used this territory as well. Sites of sacred significance, as well as village sites and collection areas, are found in the southern Sierras.

Scenic Quality

The study area has an overall scenic quality rating of "high-medium." It encompasses portions of two distinct scenic-quality polygons, the "high country" polygon, receiving an outstanding scenic quality rating, and the "foothills" section, receiving a low-medium rating. The high country portion received a high score in vegetation and high-medium scores in landform, color, and uniqueness, while the foothills section received medium scores in landform and vegetation and low scores for color and uniqueness. The study area provides a natural scenic backdrop to Indian Wells Valley and State Route 395, which is a designated State Scenic Highway.

General Recreation

This unit has outstanding opportunities for quail, dove, deer, and rabbit hunting.

Range Uses and Potential

The WSA is in two grandfathered allotments, Tunawee Common and Walker Pass. There are no wild horses or burros here.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

A variety of comments reflected the overall natural condition and opportunities for primitive recreation, as well as the presence of roads and ways. Further field examination yielded no changes in the findings.

Study Phase

Of the 40 comments received on WSA 157, 18 favored wilderness designation. Habitat for unique flora and fauna (a "species spillover" with running water in Sierra Eastern slope Canyons), wildlife (specifically eagles), and primitive recreation were mentioned. The area's contiguity to Domeland Wilderness would provide week-long hikes. The need for archaeological site protection was discussed. Motorists on State Route 395 are afforded a view

of a wilderness area. The area adjoins a proposed RARE II area, which would enhance management as wilderness.

The comments opposing wilderness designation mentioned sights and sounds from the highway, aqueduct, and valley communities. Desire for recreation, specifically hunting, was shown. The feeling that mining should be allowed was also expressed.

One comment was received in response to the workbook. The area should receive wilderness designation to protect ecological values.

Draft Plan Alternatives

A variety of public comments specific to WSA 157 was received in response to the Draft Desert Plan Alternatives. For example, one indicated complete agreement with the Protection Alternative, another called for more wilderness than recommended in the Protection Alternative, while a third insisted that the entire study area be recommended as suitable for wilderness in the Balanced Alternative. In addition, vehicle access routes should remain open within a wilderness area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 157, Little Lake Canyon, is recommended as suitable for wilderness designation. Although not ranked among the very highest study areas, the site possesses many qualities which make it a unique area within the CDCA.

Competing land uses, represented by recreation, geology, energy, minerals, and range were all considered. The resource value of the two existing grandfathered allotments, the potential for mineral development and/or geothermal energy production, and the outstanding hunting opportunities did not exceed the area's value as wilderness.

IMPACT OF PROPOSED PLAN

The small Class M area should not have significant adverse impacts to wilderness characteristics. Development has already occurred at the site. Wilderness values would be preserved in the Class C area.

WILDERNESS STUDY AREA 158

Owens Peak

GENERAL DESCRIPTION

The northern boundary of this area (42,400 acres)[1] is Nine-Mile Canyon Road. The eastern boundary is the Los Angeles Aqueduct maintenance road. The southern boundary is State Route 178. The western boundary is the California Desert Conservation Area Boundary. Approximately 10-15 percent of this area is non-public land located in the middle and southern portions. The remainder is public land. A large part of the western and southern portions of the study area is embraced in a National Cooperative Land and Wildlife Management Area withdrawal (Public Land Order 2594). There is also considerable acreage involved in stock driveway withdrawal (Secretarial Order of April 17, 1934, Stock Drive Way #235). The SW1/4SW1/4, Section 28, T. 25 S., R. 38 E., has been withdrawn as a public water reserve. There are recorded mining locations in the southern portion of the study area. This WSA is 95 percent mountains, 3 percent dissected fans, and 2 percent alluvial fans.

WILDERNESS QUALITY

Description of Environment

The topography ranges from the valley floor to the eastern portion of the Sierra Nevada including Owens Peak (elevation 8,475 feet) and Morris Peak (elevation 7,208 feet). The valleys are diversified, some relatively open and flat, some surrounded by steep mountains. Steep mountains in the western portion are diversified with canyons that wind up the eastern Sierra. Vegetation varies: creosote, associated desert shrub, and scattered portions of yuccas in the valleys and bajadas. Farther up the canyons, scattered yucca, cacti, desert shrub, annuals, and cottonwood trees are found. Vegetation at the higher elevations is generally sparse; there are places where only annual plants grow. There are other places where scattered and thick stands of pinyon pines cover the mountainsides and crests.

Natural Condition

The majority of this area is undeveloped land which has retained its primeval character. There are also portions of this area where man and his works are substantially noticeable. A portion of the road up Sand Canyon has been excluded because of the maintained character of the road. The ways that branch off the main road back up Sand Canyon are not maintained, do not

[1]Portions of T.24., Rs. 37 and 38 E.; T.25 S., Rs. 37 and 38 E.; T. 26 S., Rs. 37 and 38 E.; and T. 27 S., Rs. 37 and 38 E., MDM.

substantially affect the naturalness of this area, and can be reclaimed by natural forces. The Indian Wells Canyon Road has been excluded because of the maintained character of the road. The several mines and branch roads along the Indian Wells Canyon Road have also been excluded because of the maintained nature of the access roads and the apparent active mining in the form of open shafts, slag piles, various machinery, and locked gate. Even though these active mining sites do exist, they are predominantly screened by the varied topography and are substantially unnoticeable. Other ways along the lower accessible sopes have been excluded as well.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Outstanding opportunities for solitude are found in this area. The diverse terrain, which includes high winding canyons and the dense pinyon pine forest, provides excellent screening between visitors. Primitive types of recreation can be found because of the varied topography and vegetation which allow diverse types of recreation and unconfined movement. The Pacific Crest Trail also passes through the area near the western boundary.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 32 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has known potential for tungsten in the southern part of the area (the Hi Peak tungsten mine recently in production). Twenty-seven claims are recorded in the Indian Wells Valley area. Copper and gold are also reported here.

Vegetation

Three riparian areas are present in Sand Canyon, Grapevine Canyon, and Indian Springs Canyon. Vegetation consists mostly of creosote bush scrub, desert holly scrub, and allscale scrub. One sensitive species, Phacelia novenmillensis, occurs in Nine-Mile Canyon.

Wildlife

Habitat is highly diversified. Elevation varies from 8,475 feet on Owens Peak to open, flat valleys. Vegetation includes creosote, associated desert shrubs, and scattered portions of yuccas in the valley and bajadas.

Wildlife species diversity reflects the diversity of the habitat. Forty square miles of mule deer concentration area, 64 square miles of golden eagle foraging habitat, 31 square miles of prairie falcon foraging habitat, two golden eagle eyries, one prairie falcon eyrie, 30 square miles of yellow-eared pocket mouse habitat, and one site of the California myotis all occur here. The presence of the yellow-eared pocket mouse is especially significant; fully 40 percent of the entire range of this species within the CDCA is present within WSA 158. In addition, 68 square miles of the unique East Slope Sierra Nevada habitat is present in this WSA.

This area exhibits influences from both the western Mojave Desert and moister mountain environments. The presence of water and associated riparian vegetation in canyon systems allows for invasion by and establishment of species which could not otherwise survive here, such as the Pacific treefrog and western toad. Influences of both moist and dry environments allows for high floral and faunal species diversity within a small geographic area. Approximately 35 percent of this ecotone is present within WSA 158.

Cultural Resources

Approximately 20 square miles of high sensitivity/significance are located in the Wilderness Study Area. Two square miles of very high sensitivity/sifnificance are also located in the area.

Native American Uses, Needs, and Sites

This WSA exists within the traditional Panamint, Shoshone, and Chemehuevi territories. Native American resources can be anticipated for the canyon and foothill areas near seasonally running springs.

Scenic Quality

This study area has an over-all scenic quality rating of "medium." It encompasses portions of two, distinct scenic quality polygons, the "high country" polygon, receiving an outstanding scenic rating, and the "foothills" section, receiving a low-medium ration. The high country portions received a high score in vegetation and high-medium scores in landform, color, and uniqueness, while the foothills section received medium scores in landform and vegetation with low scores for color and uniqueness. The study area provides a natural, scenic backdrop to Indian Wells Valley and State Route 395, which is a designated State Scenic Route.

General Recreation

There are four canyons which possess unevaluated interpretive potential in this WSA. There is excellent quail, deer, dove, and rabbit hunting throughout the area and good to excellent floral display in the canyons. The majority of the WSA was identified as a primitive area in the El Paso Management Framework Plan and was subsequently closed to motorized vehicles. The Pacific Crest Trail, a National Scenic Trail, traverses the extreme western boundary of the unit.

Range Uses and Potential

This WSA is in the Walker Pass Allotment. The allotment is grandfathered. There are no wild horses or burros here.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

The large number of comments received were mostly in favor of giving the area further wilderness study because of outstanding flora and fauna and rugged terrain; others referred to imprints of man. The latter portions were excluded where appropriate.

Study Phase

Of the 52 comments received on WSA 158, 27 favored a wilderness designation. Scenic quality and protection of wildlife and watershed were common concerns. Sugar pine and interior live oak were specific flora listed. This area as a unique transition zone between Sierra Nevada and desert plants and animals was discussed. Desire for primitive recreation, picnics, sightseeing, and rockclimbing was shown. Contiquity to Indian Wells Valley offered a good opportunity for one-day wilderness experiences.

Contiguity to the Domeland Rare II Wilderness and the Pacific Coast Trail were seen as enhancing management under wilderness designation.

The desire for rehabilitation of motorized vehicle and grazing damage was shown. Comments opposing wilderness designation noted many recreation-related concerns: motorized vehicles, campers, hunting, and the desire to use Bill's Butte for rockclimber training.

Sights and sounds of highways, the aqueduct, active mines, and valley communities were considered to detract from wilderness quality. Elimination of guzzlers would diminish wildlife values.

One comment was received in response to the workbook -- the area is a valuable botanical unit and contains fine scenic values which need the preservation of wilderness.

Draft Plan Alternatives

The following range of public comments specific to WSA 158 was received in response to the Draft Desert Plan Alternatives. Some agreed with the Protection Alternative, others thought that a larger acreage should be recommended as suitable for wilderness in the Protection Alternative, while others insisted that the entire study area be recommended as suitable for wilderness in the Balanced Alternative. Another mentioned the need for wilderness to provide protection from motorized vehicles. In contrast, some asked for the retention of existing vehicle routes within wilderness for rockhounding.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The northern two-thirds of the Owens Peak Wilderness Study Area (158) is recommended as suitable for wilderness designation.

The Area was ranked 32 in relative wilderness values. It did not exhibit any of the qualities identified as desert-wide wilderness opportunities.

The WSA has known potential for minerals in the southern portion and one mining operation was recently in production. The primary recreation use is hunting, and this has been rated as excellent. The Pacific Crest Trail runs along the western border. Based on these values, it was decided that in the northern portion the wilderness values outweighed those of the competing resources.

The southern section was recommended for Class L. This is to provide access for exploration and development of mineral resources and to protect the natural and cultural resources which have been identified.

IMPACT OF PROPOSED PLAN

The small Class L portion is mainly confined to the Short Canyon area and adjacent bajada. Impacts within the canyon should be confined to the immediate vicinity and should have no major effect over most of the WSA.

WILDERNESS STUDY AREA 159

Cow Heaven

GENERAL DESCRIPTION

The northern boundary of this area (6,660 acres)[1] is State Route 178. The eastern boundary is the Los Angeles Aqueduct maintenance road. The southern boundary is Sage Canyon Road. And the western boundary is the Sequoia National Forest RARE II area. Approximately 10-15 percent of the area is non-public land located in the western and northern portions, with a few non-public parcels scattered in the middle portion. The study area is embraced within a National Cooperative Land and Wildlife Management Area withdrawal (Public Land Order 2594). This WSA is 75 percent mountains and 25 percent alluvial fans.

WILDERNESS QUALITY

Description of Environment

The terrain is composed of the steep mountains of the eastern Sierra Nevada and their interface with the high desert. These mountain ridges flank deep intervening canyons along the northern and southern borders and a large canyon, Cow Heaven, in the center. The canyon floors contain dense clusters of Joshua trees, low desert shrubs, and cactus. The steep, sandy mountain slopes are sparsely vegetated with mixed desert shrubs. The ridgetops are covered with stands of pinyon and juniper. Elevations range from 3,400 feet on the desert floor to 6,700 feet on the highest ridgetop.

Natural Condition

A major portion of the roadless area is affected primarily by natural forces. Lower slopes where motorized vehicles have easy access have been excluded, along with the maintained road into Cow Heaven, where stock watering ponds and other range facilities are noticeable.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Types of Recreation

Outstanding opportunities for solitude and primitive and unconfined types of recreation are available. The deep, winding canyons and adjacent Sequoia National Forest RARE II area further enhance these opportunities.

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[1]Portions of Ts. 26 and 27 S., Rs. 36 and 37 E., MDM.

WILDERNESS STUDY AREA RANKING

This WSA was ranked 77 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Data are insufficient to interpret potential.

Vegetation

No unusual plant assemblages occur within WSA 159. Vegetation within the WSA consists mostly of Utah juniper-one leaf pinyon woodland and blackbrush scrub. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

This WSA extends along the extreme eastern edge of the southern Sierra Nevada from Freeman Canyon south to Sage Canyon. This is a portion of a broad ecotonal region exhibiting a unique mixing of Sierra Nevada and Mojave flora and fauna; desert plants, such as creosote, Joshua tree, and burrobush, may be found in close association with pinyon pine, juniper, and canyon oak.

The eastern edge of the Sierra Nevada contains large numbers of golden eagle and prairie falcon nesting sites. Within this WSA, a single prairie falcon eyrie used by a nesting pair of birds and 11 square miles of forage area are present, as well as 5 square miles of golden eagle foraging area. Another important wildlife species of limited distribution present throughout the WSA is the yellow-eared pocket mouse; approximately 15 percent of the total range of this species within the CDCA is present within WSA 159.

The varied habitats provided by this ecotone and water sources available in Grapevine and Sage Canyons provide microhabitats for species which otherwise could not survive. Examples of species which have dispersed eastward into this area include the coast horned lizard, western toad, and California legless lizard. Species which have extended their ranges westward include the desert night lizard and banded gecko. The establishment of desert and mountain species has produced a great degree of diversity over a small geographic area. The riparian vegetation present in canyon bottoms attracts a number of migrant and resident bird species. The eastern slope of the Sierra Nevada was recommended for ACEC designation.

Cultural Resources

Approximately 3 square miles of high sensitivity/significance are located in the WSA.

Native American Uses, Needs, and Sites

No Native American resources are currently documented for this WSA. The territory has been under traditional use by the Kawaiisu, Paiute, and Chemehuevi. Anticipated resources would occur in the canyon and foothill areas near seasonally flowing streams.

Scenic Quality

The study area has a "medium" scenic quality rating. It received medium scores for landform, vegetation, and uniqueness and a low score for color. It provides a visually unintruded backdrop to Indian Wells Valley as viewed from State Route 14.

General Recreation

The Walker Pass National Register site is located on the extreme northern boundary of the WSA. This potential interpretive site is unevaluted. There is a teaching and research site which receives five to seven visits per year by colleges and universities. There is excellent quail, deer, dove, and rabbit hunting and good floral displays throughout.

A portion of a concentrated use zone is within this WSA; this zone experienced a total of 9,666 visitor use days in 1978. Primary uses are camping, motorized vehicle touring and access, unauthorized motorcycle free play, motorcycle touring and access, shooting, hunting, and sightseeing.

Range Uses and Potential

The WSA falls within portions of Walker Pass and Rudnick Common Allotments. Both are grandfathered.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments detailed ways and trails and permanent structures. The adjacent RARE II area was pointed out as well. Areas impacted by motorized vehicle use to such an extent that natural values have been lost were deleted.

Study Phase

Eleven of the 36 comments received on WSA 159 favored wilderness designation. The area's contiguity to a RARE II area, the Pacific Coast Trail, and the Sierras heightened its wilderness potential for many. Scenic quality and protection of flora (rare wildflowers, pinyon pines) and fauna (migrating birds, mammals, reptiles, eagles), which are concentrated in the area because of a spring, were mentioned. The need to rehabilitate motorized vehicle and grazing damage was expressed.

The comments received opposing wilderness listed sights and sounds-- State Route 14, a transmission line, aqueduct, low air traffic, motorized vehicle noise (especially in Horse Canyon, where they are in continuous use)--as detracting from wilderness quality. Recreation desires such as hunting, rockhounding, and weekend motorcycling by families wishing to enter the Sequoia National Forest, were also expressed. The fact than an MFP has already listed the area as available to motorized vehicles on designated roads and trails was mentioned repeatedly.

Some comments were received in response to the workbook. Some encouraged wilderness classification to protect a valuable botanical unit. The California Department of Fish and Game opposed wilderness designation because they need to continue the maintenance of gallinaceous guzzlers and developed springs.

Draft Plan Alternatives

A variety of public comments, specific to WSA 159, was received in response to the Draft Desert Plan Alternatives. For example, one indicated complete agreement with the Protection Alternative, another expressed approval of the Balanced Alternative, while a third insisted on combining the study area with adjacent Wilderness Study Areas to create a large area suitable for wilderness. In addition, retention of existing vehicle routes within wilderness areas was recommended.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 159, Cow Heaven, is recommended as nonsuitable for wilderness designation.

This area, which joins a U.S. Forest Service "further planning" area in the Sequoia National Forest, is a popular recreation area. Many recreation activities, both motorized and nonmotorized, are available. Some of the finest hunting opportunities within the CDCA can be found here. The WSA falls within portions of two grandfathered grazing allotments.

In terms of its relative wilderness resource values, the WSA ranked in the lower half of those considered. It was decided that the area's value for general recreation was more significant than that for wilderness. The entire WSA is recommended for Class L designation. This classification would protect both the varied wildlife populations and their habitats and the two areas of cultural sensitivity without significantly restricting recreational uses.

IMPACT OF PROPOSED PLAN

The Class L designation would provide adequate protection for most values. Topography and vegetation would tend to localize impacts and reduce overall effects. Mitigation, particularly in the flatter areas, would be required to lessen the scope of the impacts.

WILDERNESS STUDY AREA 160

Horse Canyon

GENERAL DESCRIPTION

The northern boundary of this area (4,150 acres)[1] is Horse Canyon Road. The eastern boundary is the Los Angeles Aqueduct maintenance road. The southern boundary is Bird Spring Canyon Road. And the northwestern boundary is the Sequoia National Forest RARE II area. Only 1 to 2 percent of the area is non-public land located near the mid-western boundary. The study area is included in a National Cooperative Land and Wildlife Management Area withdrawal (Public Land Order 2594). This WSA is entirely mountains.

WILDERNESS QUALITY

Description of Environment

The site is in the southern Sierra Nevada and consists of a mountain ridge between two major canyons. The eastern portion is a desert bajada where elevations range from 3,400 to 3,800 feet and support a creosote bush scrub plant community. The long deep canyons climb to 5,000 feet and support dense clusters of Joshua trees and various low desert shrub species. The line of peaks on the ridge attains elevations to 6,800 feet and supports stands of pinyon and juniper. Intervening slopes are covered with desert shrubs.

Natural Condition

This scenic area contains impacts from man's presence over the lower elevations where access by motorized vehicles is available. Jeep and motorcycle trails are apparent over many of these sparsely vegetated areas. Cattle grazing occurs in Horse Canyon, and there is a developed water source within the canyon. The boundaries of the Wilderness Study Area encompass those steeper mountainous areas where motorized vehicle tracks and other structures do not occur.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The diverse terrain of the area and the adjacent Sequoia National Forest RARE II area on the west provide a wide range of ecosystems from high desert to pinyon-juniper. Topographic and vegetative screening, along with the physiographic features of the Sierra Nevada, lend to the visitor outstanding opportunities for solitude and primitive and unconfined types of recreation. The Pacific Crest Trail passes through the area between Bird Springs Pass Road and the Scodie Mountains.

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[1]Portions of Ts. 27 and 28 S., Rs. 36 and 37 E., MDM.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 100 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata. Interpretation of geochemical anomalies is based solely on statistical work by Terradata.

This WSA has potential for uranium in the western half of the area. No claims are recorded.

Vegetation

No unusual plant assemblages occur within WSA 160. Vegetation within the WSA consists mostly of creosote bush scrub, blackbrush scrub, and Utah juniper-one leaf pinyon woodland.

Wildlife

The area is a highly diverse, broad ecotonal region with a unique mixing of Sierra Nevada and Mojave Desert floral and faunal elements. Desert plants such as creosote bush, Joshua tree, burrobush, and shadscale may be found in close association with pinyon pine, juniper, canyon oak, and digger pine.

The varied habitats provided by the ecotone between Sierran and Mojavean floras and faunas and the water available in the canyons provide microhabitats for invasion by species which otherwise could not survive. Examples of species which have dispersed eastward through the canyon system include the western toad, coast horned lizard, striped racer, California legless lizard, and California pocket mouse. Species which have extended their ranges westward into this area include the desert night lizard and banded gecko. Several species of reptiles, including the gopher snake, side-blotched lizard, and western whiptail exhibit morphological characteristics intermediate to coastal and desert races (Stebbins, personal communication).

Approximately 3 percent of this unique ecotonal area is present within WSA 160. This includes 5 square miles of habitat for the yellow-eared pocket mouse, representing approximately 4 percent of the total range of this species within the CDCA. The yellow-eared pocket mouse, proposed for BLM sensitive species listing, is restricted to a few mountain canyons in this region.

The invasion of desert species from the east and species from moister habitats to the west has produced a high degree of diversity over a small geographic area. Because of the great degree of overlap and the fact that

the canyons on the eastern slope of the Sierras act as a funnel for dispersion, this area is an ideal location to view and study various animal species. Such studies as species intergradation, habitat segration, and geographic isolation can be conducted here.

Cultural Resources

This small area has no known areas of cultural resources significance/sensitivity.

Native American Uses, Needs, and Sites

This area was traditionally used by the Kawaiisu for collection purposes. Sites of occupation and sacred use are found within this territory. Resources can be anticipated in the canyons and Sierra Nevada foothills.

Scenic Quality

This study area occupies a small portion of a scenic quality polygon with a scenic quality rating of "medium." The polygon received medium scores for landform, vegetation, and uniqueness and a low score for color. The study area provides a visually unintruded backdrop to Indian Wells Valley as viewed from State Route 14.

General Recreation

The Horse Canyon pictograph potential interpretive site is within this WSA and has been rated "medium." There is excellent quail, deer, and dove hunting throughout and excellent birdwatching in Horse Canyon. The adjoining areas are extensively used for motorized vehicle touring. However, this use is currently limited within the WSA.

Range Uses and Potential

This WSA is in the Rudnick Common Allotment. There are no wild horses or burros here.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments point out the presence of a microwave tower and many trails. These impacted areas have been deleted from the WSA. Several comments refer to the portion which retains its natural condition.

Study Phase

Of the 58 comments received on WSA 160, 23 favored wilderness designation.

The area's contiguity to a RARE II area and trailhead sites for the Pacific Crest Trail and other trails through the Sierras were mentioned. The need to

protect wildlife and watershed values, where "desert meets the Sierra," as well as archaeological values, was discussed. Primitive recreation values of hiking, nature study, and hunting were mentioned. The need to rehabilitate motorized vehicle trails was also discussed.

The majority of comments opposed wilderness designation for WSA 160. Hunting, grazing, weekend camping, rockhounding, motorized vehicle touring and competitive racing, and prospecting were uses desired by commenters.

Sights and sounds of a microwave station, State Route 14, and an aqueduct were listed as detracting from wilderness potential. Also expressed was the feeling that any area which requires rehabilitation should be excluded from wilderness designation.

Some comments were received in response to the workbook. Some expressed the view that the area was substantially impacted by man and should not be considered for wilderness designation. Others thought the best use for the area would be for ranching, mining, rockhounding, and motorized vehicles.

Draft Plan Alternatives

The following range of public comments specific to WSA 160 was received in response to the Draft Desert Plan Alternatives. Some agreed with the Protection Alternative. Others thought that by combining this WSA with adjacent Wilderness Study Areas a greater acreage could be recommended as suitable for wilderness than in the Protection Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Horse Canyon Wilderness Study Area (160) is recommended as nonsuitable for wilderness designation.

This area joins U.S. Forest Service "further planning" area in the Sequoia National Forest. As with the surrounding WSAs in the southern Sierras, it is a popular recreation area. Motorized vehicle touring is popular throughout this general area. The WSA also provides excellent hunting opportunities and supports one grazing allotment.

Wilderness Study Area 160 was ranked low in relation to others in the CDCA. It was decided that the area's value in support of general recreation was greater than its value as wilderness. The entire WSA is recommended for Class L designation to protect both wildlife and its habitat and the Native American values without significantly restricting recreational use.

IMPACT OF PROPOSED PLAN

The Class L designation would provide protection for most values. This mountain between two large canyons does not have the topographic variation to absorb many impacts. With proper mitigation and management, some activities could be permitted with minimal impacts.

WILDERNESS STUDY AREA 160B

Kelso Peak

GENERAL DESCRIPTION

The northern boundary of this area (9,750 acres)[1] is the California Desert Conservation Area boundary. The eastern boundary is the Kelso Valley Road. The southern boundary is Piute Mountain Road. The Sequoia National Forest defines the western boundary. Approximately 25 to 35 percent of this area is non-public land located in the eastern and northern portions. All of the area is embraced within a National Cooperative Land and Wildlife Management Area withdrawal (Public Land Order 2594). The records indicate there are at least three mining claims. This WSA is entirely mountains.

WILDERNESS QUALITY

Description of Environment

The roadless area encompasses Kelso Peak and associated drainages to the north, south, and east. To the west the Kelso Mountain system is continuous with the Piute Mountain Range in Sequoia National Forest. The upper slopes of Kelso Peak are dotted with pinyon pine and juniper trees. Intervening slopes are brushy with large granite rock outcroppings. The boulder-strewn valleys support dense stands of Joshua trees. Elevations in the roadless area range from 3,300 feet in the far northwestern corner to 5,090 feet at Kelso Peak.

Natural Condition

Several portions of the area display evidence of man's works. The eastern portion, just west of Kelso Valley Road, contains homes, ranches, and a network of roads that extends from these man-made structures to penetrate the eastern slopes and valleys. Several motorized vehicle ways in the southern portion have also degraded the natural condition of the landscape. The remaining portion of the area is in a natural condition and appears to retain its primeval character. The boundary of the Wilderness Study Area begins at approximately 5,600 feet in the southwestern corner, follows the mountain valley interface, excluding houses and other structures in the valley areas, and descends to 3,500 feet in the northwestern corner.

[1]Portions of Ts. 27 and 28 S., R. 35 E., MDM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The mountainous portion provides a diversity of terrain with outstanding opportunities for primitive and unconfined recreation. Solitude is enhanced by the adjacent RARE II area in the Sequoia National Forest and the remote location of this roadless area. In the valley portion, human habitation and numerous other structures limit opportunities for solitude and primitive and unconfined types of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 118 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has possible potential for uranium in the eastern half. Five claims are recorded.

Vegetation

No unusual plant assemblages occur within WSA 160B. Vegetation within the WSA consists mostly of Utah juniper-one leaf pinyon woodland.

Wildlife

This WSA is located in the southwestern edge of the Sierra Nevada Range, along the western boundary of the CDCA. Vegetation at lower elevations is dominated by creosote-burrobush scrub with stands of Joshua trees. The upper slopes of Kelso Peak contain isolated pinyon and juniper trees.

This WSA is located within the Jawbone-Butterbread Canyon complex recommended for ACEC designation. The canyon complex contains a highly diverse faunal assemblage exhibiting Mojave Desert, Sierra Nevada, San Joaquin Valley, and Transverse Ranges characteristics. The varied habitats provided by this large ecotone enable a variety of species to co-exist within a small geographic area. Reptile species diversity is high and includes desert species, such as the sidewinder and chuckwalla, and species from moister habitats, such as the western fence lizard and western rattlesnake. Bird species diversity is also high, including raptors such as the red-tailed

hawk, barn owl, great horned owl, prairie falcon, and golden eagle. Approximately 3 percent of the total canyon complex area is located within WSA 160B.

Cultural Resources

In the southern tip of this WSA is an area of about 1.5 square miles of very high cultural resource sensitivity.

Native American Uses, Needs, and Sites

This area was traditionally used by the Kawaiisu for collection purposes. Sites of occupation and sacred use are found within this territory. Resources can be anticipated in the canyons and Sierra Nevada foothills.

Scenic Quality

This study area has an overall scenic quality of "medium". It received medium scores for color and vegetation and low scores for landform and uniqueness.

General Recreation

This unit includes a seldom-used teaching and research site and has excellent hunting for quail, dove, deer, and rabbit throughout.

Range Uses and Potential

The WSA is in the Rudnick Common Allotment. There are no wild horses or burros here.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

The comments received support the findings.

Study Phase

Of the four comments received on WSA 160B, all favored wilderness designation. Scenic quality and contiguity to RARE II lands were the most common comments. The unique flora and fauna of the varying elevations were discussed in terms of protection and nature study. Desire for hiking and hunting and the area's closeness to the Pacific Crest Trail were other comments.

Suggestions were made to exclude private lands in the eastern portion and to rehabilitate areas impacted by motorized vehicles.

One comment received in response to the workbook noted that the area's best use would not be as wilderness and that the impacts of adjacent use destroy the wilderness values..

Draft Plan Alternatives

The following range of public comments specified to WSA 160B was received in response to the Draft Desert Plan Alternatives. Some agreed with the Protection Alternative. Others thought that by combining this WSA with adjacent Wilderness Study Areas a greater acreage could be recommended as suitable for wilderness than in the Protection Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 160B, Kelso Peak, is recommended as nonsuitable for wilderness.

The area is adjacent to the Sequoia National Forest in the southern Sierras. Like the surrounding WSAs, this one is part of a larger popular recreation area which supports both motorized and nonmotorized activities. Motorized vehicle touring constitutes a major use of the site. This WSA also offers excellent hunting for quail, dove, deer, and rabbit. The area is also included in the Rudnick common grazing allotment.

This Wilderness Study Area ranked 118 in relation to the other areas under consideration. It was determined that this WSA, like the surrounding ones, is of greater importance as an area of general recreation rather than wilderness.

To protect the diverse wildlife and those areas displaying very high cultural resource sensitivity, the entire WSA is recommended for Class L designation.

IMPACT OF PROPOSED PLAN

A Class L designation would provide adequate protection for most wilderness and scenic values. Topography is varied and impacts would be localized. Motorized vehicle use on designated routes would degrade the naturalness of the area.

WILDERNESS STUDY AREA 160C

Skinner Peak

GENERAL DESCRIPTION

The northern boundary of this area (1,100 acres)[1] is a combination of the California Desert Conservation Area boundary and the Sequoia National Forest RARE II area. The eastern boundary is the Sequoia National Forest RARE II area. The southern boundary is the Bird Springs Canyon Road. The western boundary is the Kelso Valley Road. Approximately 95 percent of the area is public lands with a small parcel of non-public land located on the extreme western edge. The major portion of this study area is embraced within two withdrawals: a stock drive way (Secretarial Order of January 2, 1933, Stock Drive Way WDL 235) and a National Cooperative Land and Wildlife Management Area withdrawal (Public Land Order 2594). This WSA is entirely mountains.

WILDERNESS QUALITY

Description of Environment

Steep mountainsides dominate the area with elevations of 3,500 feet to 5,200 feet. Vegetation in the lower elevations includes creosote, yucca, cholla, desert shrubs, and some Joshua trees. Upper elevations contain scattered desert shrubs and some juniper in the eastern section.

Natural Condition

The area has been affected primarily by natural forces, with man's imprint substantially unnoticeable. The absence of permanent facilities or human habitation helps the area retain its primeval character.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

This area adjoins the Sequoia National Forest RARE II area on the south and WSA 160 on the west, which also adjoins the RARE II area. Outstanding opportunities for solitude and a primitive and unconfined type of recreation could only be obtained if the adjoining RARE II areas are considered.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 84 out of 137 WSAs.

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[1]Portions of T. 27 S., Rs. 35 and 36 E., MDM.

RESOURCES CONSIDERED

Geology-Energy-and Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata. Interpretation of geochemical anomalies is based solely on statistical work by Terradata.

This WSA has known potential (past producers) for uranium. No claims are recorded.

Vegetation

No unusual plant assemblages occur within WSA 160C. Vegetation within the WSA consists mostly of creosote bush scrub, blackbrush scrub, and Utah juniper-one leaf pinyon woodland.

Wildlife

A portion of the eastern slope of the Sierra Nevada and the Jawbone Butterbread Canyon Complex unique habitats are present. Each is represented by 1 square mile of habitat. The canyon complex, located on the western fringe of the Mojave Desert, exhibits influences from both xeric and mesic environments. Faunal diversity is very high, including at least 32 species of reptiles and amphibians. The eastern Sierra slope supports a similar wide and varied faunal assemblage.

Cultural Resources

This small WSA adjunct has no known cultural resources.

Native American Uses, Needs, and Sites

This area was traditionally used by the Kawaiisu for collection purposes. Sites of occupation and sacred use are found within this territory. Resources are anticipated in the canyons and Sierra Nevada foothills.

Scenic Quality

This study area encompasses a small portion of a scenic quality polygon that is rated "medium." It received low scores for landform and uniqueness and medium scores for color and vegetation.

General Recreation

This unit has excellent quail, deer, dove, and rabbit hunting throughout.

Range Uses and Potential

This WSA is in the Rudnick Common Allotment. There are no wild horses or burros present.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Very few comments were received; the majority of them stated that this area was under 5,000 acres in size. However, this unit is adjacent to a U.S. Forest Service RARE II area.

Study Phase

Of the five comments received on WSA 160C, three opposed wilderness designation. Desire for grazing, mining, and motorized vehicle use was indicated. The fear was expressed that the wilderness study was hurried and, for that reason, included roaded areas and areas smaller than 5,000 acres.

The comments favoring wilderness designation noted the area's contiguity to RARE II lands and the Pacific Crest Trail trailhead, which heighten the area's wilderness quality.

No comments were received in response to the workbook.

Draft Plan Alternatives

The following range of public comments specific to WSA 160C was received in response to the Draft Desert Plan Alternatives. Some agreed with the Protection Alternative. Others thought that by combining this WSA with adjacent Wilderness Study Areas, a greater acreage could be recommended as suitable for wilderness than in the Protection Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 160C, Skinner Peak, is recommended as nonsuitable for wilderness designation.

The site is adjacent to a U.S.F.S. "further planning" area in the Sequoia National Forest. This very small WSA, like those in the surrounding area, is a part of a popular recreation area. Motorized vehicle touring is a favorite activity throughout the general area. Hunting opportunities for quail, deer, dove, and rabbit are excellent. The area also supports one grazing allotment.

This study area ranked in the lower half of potential areas. It was determined that the value of general recreation exceeded the wilderness value. The entire WSA is recommended for Class L designation to protect the natural and Native American values without significantly restricting recreational use.

IMPACT OF PROPOSED PLAN

In Class L, most values could be protected. Grazing in the flat areas would require mitigation to preclude degrading the scenic values. Management and control of fencing and support equipment would be needed.

WILDERNESS STUDY AREA 163

Frog Creek

GENERAL DESCRIPTION

The northern boundary of this area (10,600 acres)[1] is Bird Spring Canyon Road. The eastern boundary is the Los Angeles Aqueduct Road. The western boundary is the Kelso Valley Road. And the southern boundary is Dove Springs Canyon Road. Approximately 10 to 15 percent of this area is non-public land located in the northwestern and southwestern portions. A major portion of this study area is embraced within two withdrawals: a stock drive way (Secretarial Order of January 21, 1933 Stock Drive Way WDL 235) and a National Cooperative Land Wildlife Management Area withdrawal (Public Land Order 2594). The WSA is entirely mountains.

WILDERNESS QUALITY

Description of Environment

The area consists of an uplifted mountainous region which is continuous with mountains south of Dove Spring Road. The western, northern, and eastern edges are valley areas. Dense clusters of Joshua trees are the predominant vegetation of these valley areas. The mountain slopes are covered with sagebrush, while the upper reaches have scattered stands of pinyon and juniper. Elevations in the valleys range between 3,500 feet and 4,500 feet, while elevations of the mountain areas extend up to 6,365 feet.

Natural Condition

Certain regions of the roadless area contain structures such as stock-watering facilities, roads, and ways. Motorized vehicle activity has had significant effect in the Kelso Valley and in the eastern bajada which descends to Indian Wells Valley. A microwave tower with access road is located just south of Bird Spring Pass. A large portion of the mountainous region is without sufficiently noticeable imprints of man's work and therefore retains its primeval character. This Wilderness Study Area boundary follows the mountain-valley interface along the 4,000-foot contour line in Kelso Valley. The southern boundary is Frog Creek Canyon. The northern and eastern borders generally follow the 4,500-foot contour line to Bird Spring Pass, where there is an exclusion for the microwave tower.

[1]Portions of Ts. 27 and 28 S., Rs. 35 and 36 E., MDM

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

In Kelso Valley numerous trails from motorized vehicle activity cut the area into small segments which restrict unconfined movement and solitude. The diversity of terrain and lack of man's imprints provide outstanding opportunities for solitude and primitive, unconfined types of recreation in the mountainous portions of the area. The Pacific Crest Trail bisects the area from north to south.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 99 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has known potential for uranium (past producers). Seven claims are recorded.

Vegetation

No unusual plant assemblages occur within WSA 163. Vegetation within the WSA consists mostly of Utah juniper-one leaf pinyon woodland.

Wildlife

Wilderness Study Area 163 is located along the western boundary of the CDCA. The elevation varies from about 3,500 feet to 6,375 feet south of Bird Spring Pass. A variety of habitats is represented, from Joshua tree to pinyon-juniper associations. This is an ecotonal area exhibiting affinities to the Sierra Nevada, San Joaquin Valley, and Mojave Desert. This WSA includes portions of two proposed ACECs: Eastern Slope of the Sierra Nevadas (3 square miles) and Butterbread-Jawbone Canyon Complex (16 square miles) representing approximately 1 percent and 5 percent of the total area, respectively.

The eastern slope of the Sierra Nevadas (Sierra Canyons) includes a wide variety of species, some of which may be found within the WSA. These include the western toad, coast horned lizard, striped racer, California legless lizard, and California pocket mouse from the west and desert night lizard and banded gecko from the east. There is a high probability of the occurrence of

a salamander, perhaps the rare Tehachapi salamander, in this area where there is permanent water.

Cultural Resources

No cultural resources are known to exist in this WSA. However, the area has not been systematically surveyed.

Native American Needs, Uses, and Sites

This area was traditionally used by the Kawaiisu for collection purposes. Sites of occupation and sacred use are found within this territory. Resources are anticipated in the canyons and Sierra Nevada foothills areas.

Scenic Quality

This study area covers a small portion of a large scenic quality polygon that rated "medium" in scenic quality. It received low scores for landform and uniqueness and medium scores for color and vegetation.

General Recreation

This unit has excellent quail, deer, dove, and rabbit hunting throughout. Much of the motorcycle and to a lesser extent four-wheel drive vehicle touring originating out of Dove Springs and Jawbone Canyons takes place in and around this WSA. The eastern edge of the area is crossed by the Pacific Crest Trail, a National Scenic Trail.

Range Uses and Potential

This WSA is in the Rudnick Canyon Allotment. There are no wild horses or burros here.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Most comments received supported the findings and reflected the overall natural condition.

Study Phase

Of the 12 comments received on WSA 163, all favored wilderness designation. The desire to protect the watershed flora and fauna was commonly expressed, specifically the pinyon pines and Joshua trees. Primitive types of recreation, hiking, and nature study were desired. The need to rehabilitate areas destroyed by motorized vehicles was commonly expressed. The WSA was seen as a natural extension of WSA 160.

Some comments were received in response to the workbook. All comments opposed wilderness designation for the area because wilderness was not the

best use. It was recommended that the boundaries be adjusted because of roads, intrusions of man, and adjacent noncompatible uses.

Draft Plan Alternatives

The following range of public comments specific to WSA 163 was received in response to the Draft Desert Plan Alternatives. Some agreed with the Protection Alternative. Others thought that, by combining this WSA with adjacent Wilderness Study Areas, a greater acreage could be recommended as suitable for wilderness than in the Protection Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 163, Frog Creek, is recommended as nonsuitable for wilderness designation.

The area includes areas of past uranium development and, therefore, has potential for future activity. The area is included in the Rudnick Canyon grazing allotment.

This WSA is part of a larger area which has proven to be a favorite recreation area. A large percentage of the motorcycle and a lesser amount of four-wheel drive touring, which originate in nearby Jawbone Canyon and Dove Springs takes place within this WSA. In addition, the area provides excellent hunting opportunities and is also crossed by the Pacific Crest Trail.

The area ranked 99 which placed it in the lower half of all WSAs. It was decided that the area is serving its highest and best use in meeting the general recreation needs of the area. Placement of the area in Class L would adequately protect the wildlife and the potential cultural and Native American resources.

IMPACT OF PROPOSED PLAN

The area is recommended for Class L. In the valley areas mitigation would be required to preclude impairing the wilderness and scenic values present. In the more rugged mountainous regions, impacts would be localized. Motorized vehicle use, spilling over from adjacent high use areas would have to be rigidly controlled since this type use, even on designated routes, could significantly reduce the naturalness of the area.

WILDERNESS STUDY AREA 164

El Paso Mountains

GENERAL DESCRIPTION

The western boundary of this area (19,600 acres)[1] is the Red Rock-Inyokern Road. The southern boundary from west to east is a maintained dirt road southwest to a water tank and farther to a well at the north end of Bonanza Gulch. It proceeds eastward through the following points: Smith Mine, Colorado Camp, Apache Mine Holland Camp, Mormon Flat, and Iron Canyon to Garlock Road. The eastern boundary is the existing right of way of a steel-structure powerline corridor. The northern boundary, at its western point, leaves the Red Rock-Inyokern Road proceeding southeast 3.4 miles to another apparently maintained road leading to a huge sandpit. From a point just south of the pit the northern border runs east to the eastern boundary. Approximately 10 to 15 percent of this area is non-public land, concentrated in the northern portion and randomly scattered throughout. There are several mining claims in the southern portion. The WSA contains 40 percent mountains, 30 percent lava flows, 20 percent alluvial fans, and 10 percent badlands.

WILDERNESS QUALITY

Description of Environment

The topography of this large mountain system is diverse. Situated along the Garlock Fault, a major east-west fault, the terrain consists of numerous reddish-colored buttes and dark, uplifted mesas of volcanic origin. Intervening slopes have a golden color because of the high production of annuals. These slopes are dissected by many narrow canyons creating a badlands topography. Elevations range from 5,244 feet on Black Mountain to less than 2,000 feet along the southern boundary in Fremont Valley. The primary plant community represented is the creosote bush scrub, although the various exposures of the complex mountains provide a great variety in vegetation. The western side of the mountain contains many Joshua trees.

Natural Condition

Approximately one-half of the roadless area has been identified as having wilderness characteristics. The remaining section is impacted by the presence of numerous heavily used and eroded jeep trails and several habitations and mines. These noticeable works of man occur in Bonanza Gulch, Last Chance Canyon, Mormon Flat, Mormon Gulch, Goler Gulch, Sand Gulch, Iron

[1]Portions of T. 27 S., Rs. 38 and 39 E.; T. 28 S., Rs. 38 and 39 E.; and T. 29 S., Rs. 38 and 39 E., MDM.

Canyon, and Goler Heights. The area between Iron Canyon and Mesquite Canyon is excluded because of the presence of numerous ways and a radio facility. In all of these areas man is not a visitor; his works are substantially noticeable scars upon the landscape. The entire roadless portion east of Sheep Spring has been excluded because of the numerous ways which provide access to almost any point in that section. In spite of the numerous works of man which dominate a portion of the roadless area, a vast section remains subject to natural forces and retains its primeval character. Works of man are not visible and the natural condition is intact within the defined boundaries of this Wilderness Study Area. These boundaries are common with the roadless area boundary between the Red Rock-Inyokern Road and Holland Camp and along the western border to Section 27 (T. 27 S., R. 38 E.). The northern study area boundary leaves the Red Rock-Inyokern Road in Section 27 and skirts the lava formation along a way to a point 1/2 mile south of the sandpit in Section 32 with an exclusion of a road to a mine in Section 36 (T. 27 S., R. 38 E.). The eastern boundary is along a way from the sandpit through Sheep Spring and Dull Pick Spring to Mormon Flat.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Within the Wilderness Study Area boundaries, the varied landforms and lack of man's imprints provide outstanding opportunities for solitude. The various landforms provide outstanding opportunities for a variety of primitive and unconfined types of recreation. Within the excluded portions the numerous habitations reduce opportunities for solitude, while primitive and unconfined movement is restricted by the numerous ways.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 62 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has possible potential for metals, uranium, pumice, bentonite, sand and gravel, sodium (west half), and oil and gas. About five claims are recorded.

Vegetation

No unusual plant assemblages occur within WSA 164. Vegetation within the WSA consists mostly of creosote bush scrub. Two rare plant species occur within this WSA. One of these, Sclerocactus polyancistrus, a cactus, is sensitive and has an affinity for calcium-rich soils. The other plant is an achlorophyllous parasite of exotic distribution which has an affinity for sandy substrates. It is a significant species; however, its rarity status is problematical.

Wildlife

The habitat is predominantly creosote bush scrub, although various slopes possess isolated components of other habitats. Foraging areas for raptors include 20 square miles of habitat for prairie falcon and 6 square miles of golden eagle habitat. About 28 square miles of Mojave ground squirrel habitat are found in this WSA, approximately 1 percent of the total range of this State-listed rare species.

A portion (22 square miles) of the El Paso Raptor Management Area is within this WSA. This is one of the densest known breeding areas for golden eagles, prairie falcons, and other raptor species in the CDCA. Approximately 4 percent of the Red Mountain/El Paso Mountain Raptor Breeding Area is present in WSA 164.

Cultural Resources

The entire area is of very high sensitivity/significance.

Native American Uses, Needs, and Sites

This WSA was traditionally employed for seasonal collection by the Kawaiisu, Mojave, Paiute, and Chemehuevi. An ethnographically identified Kawaiisu village site is located in the northwest section of the WSA.

Scenic Quality

This study area, which encompasses portions of two scenic quality polygons, has an overall scenic quality rating of "high." The area is dominated by the West El Paso Mountains, which received high scores for color and uniqueness and medium-range scores for landform and vegetation. The area's diverse terrain and colorful strata accounted for its high uniqueness rating. The bajada at the western edge of the study area rated low in scenic quality. The area serves as a natural-appearing backdrop to the scenery as viewed from State Route 14.

General Recreation

The El Paso WSA contains two good interpretive sites. There is one excellent and one fair rockhounding site. Hunting for dove, quail, chukar, and rabbit throughout most of the area is excellent. There are good floral displays.

Portions of two concentrated use zones occur in this WSA with a total annual visitation of 7,828 visitor use days in 1978. Primary uses are hunting, hobby prospecting, shooting, camping, four-wheel drive and motorcycle touring and access, and unauthorized motorized vehicle free-play.

Range Uses and Potential

This WSA falls in the Cantil Canyon Allotment. There are no wild horses or burros here.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

The majority of comments referred to roads and mining activity. These locations have been reflected in the final map.

Study Phase

Of the 70 comments received on WSA 164, 50 opposed wilderness designation. Sights and sound, such as transmission lines, low-flying aircraft, heavy mining, and recreation use, were seen by many as detracting from the area's wilderness potential. Desire for multiple uses, such as hunting, rockhounding (especially at Rainbow Ridge), four-wheel driving, biking, and camping, was repeatedly indicated. Mining potential, specifically for gold, silver, and copper, was also commonly discussed. Other commenters desiring access felt that the area was not compatible with hiking, that many who wanted to sightsee or rockhound were too old to hike into the area, and that limiting access would cause increasing damage to animals and plants and discontinuance of guzzler water supply.

The comments favoring wilderness designation often mentioned the area's scenic quality and easy access from the nearby highway. The flora and fauna and archaeological sites were felt to need protection. The area is thought by some to provide "psychological, historical and geological study opportunities.

Several boundary adjustments were suggested: (1) add the small section bordered on the west by Mesquite Canyon and on the east by Iron Canyon; and (2) use firmer boundaries, such as those in the El Paso MFP. Two commenters suggested combining WSA 164 with WSA 180.

Some comments were received in response to the workbook. Some opposed wilderness classification because roads exist within the area and adjacent uses would be incompatible. Some did not disagree with BLM findings but want access roads to be included for rockhounding. A few commenters requested that a larger area be designated as wilderness.

Draft Plan Alternatives

The following range of public comments specific to WSA 164 were received in response to the Draft Desert Plan Alternatives. Some agreed with the Protection Alternative, and others agreed with the Balanced Alternative. In addition, it was expressed that the entire Wilderness Study Area should be recommended as suitable for wilderness under the Balanced Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

A portion of the El Paso Mountains Wilderness Study Area (164) is recommended as suitable for wilderness designation. The remaining part is recommended for Class L designation.

The area has possible potential for mineral and oil and gas resources and is included in the Cantil Canyon grazing allotment. Historically, the area has supported a variety of general recreation activities, both motorized and non-motorized. Dove, quail, chukar, and rabbit hunting is excellent.

Although not rated extremely high (62), the area is unique in that it is one of the closest WSAs to the Los Angeles metropolitan area and is easily accessible. Terrain diversity provides a variety of challenging activities, varying from threshold, day hiking to more demanding wilderness experiences. It was decided that the value of the central portions as a wilderness resource was more significant than its value for mineral development or unrestricted recreation.

The remaining portion was recommended for Class L. The combination of wilderness and Class L would protect the vegetation, wildlife, cultural, and Native American resources and scenic quality.

IMPACT OF PROPOSED PLAN

The northern and western bajadas are recommended for Class L designations. Grazing, mining, and motorized vehicle use would impact wilderness values here, although intensive mitigation will be required. The low, relatively flat terrain would not absorb many intrusious. Overall impacts are negative to wilderness characteristics in the Class L area.

WILDERNESS STUDY AREA 170

Golden Valley

GENERAL DESCRIPTION

The area (33,800 acres)[1] is bordered on the north by the Randsburg Wash Road and the Trona Railroad. The eastern border is the U.S. Naval Weapons Center, Mojave Range. The southern boundary is Steam Well Road and a well-maintained road extending farther east to Blackwater Well. The western boundary is a pipeline road. The area is 95 percent public lands. Non-public sections are isolated and scattered. There are several recorded mining claims in the northwest portion. This WSA contains 65 percent mountains, 30 percent alluvial fans, 3 percent badlands, and 2 percent hills.

WILDERNESS QUALITY

Description of Environment

The area includes the Lava Mountains, Golden Valley, the Almond Mountains, the Summit Range, Teagle Wash, and the Spangler Hills. The Lava Mountains rise approximately 1,700 feet from the desert floor to an elevation of 4,985 feet with canyon walls of spectacular, multicolored sedimentary types. Golden Valley is a rolling valley approximately 8 miles long and 2 miles wide between the Lava and Almond Mountains. The Summit Range of sand hills supports a Joshua Tree woodland and lies just north of the Lava Mountains. This range slopes northward into Teagle Wash where elevations range from 2,800 feet along the western boundary to 2,000 feet near the Randsburg Wash Road. Teagle Wash supports a creosote bush scrub plant community.

Natural Condition

The quality of the landscape is a direct reflection of use designations. Teagle Wash has been designated as an open area for vehicle use. Approximately 20 permits per year are issued for motorcycle racing. As a result of intensive organized competition, the area is extremely impacted. Vehicle tracks and a network of motorcycle trails blanket the valley, thus significantly altering the primeval character of the landscape. Summit Range was designated as "open to vehicle use on existing roads and trails only," as was the narrow corridor running south between Trona Road and the Lava Mountains. Erosion has occurred in many places, intensifying the impact upon the landscape. The flat area between Trona Road and the western side of the Lava Mountains is a corridor connecting areas of motorized vehicle use in Teagle Wash and the Red Mountain/Cuddeback area. Here also, intensive

[1]Portions of T. 28 S., R. 41, 42, and 43 E.; T. 29 S., R. 41 and 42 E.; and T. 30 S., R. 42 E., MDM.

vehicle use has significantly altered the apparent naturalness of the land. The Lava Mountains have been closed to vehicle use and are mostly inaccessible to such use due to their extremely rugged nature. A few, long-abandoned mining impacts occur in the Lava Mountains north of Steam Well. In contrast to Teagle Wash, where man and his own works dominate the landscape, these mountains are virtually undisturbed by man and retain their primeval character.

Golden Valley lies to the east of the Lava Mountains and carries a "designated roads and trails only" vehicle use designation. The area contains some random vehicle tracks as it is quite accessible by a dirt road which enters the valley from the south. Another visible impact in Golden Valley is a result of intensive sheep grazing. Sheep "trails" are visible throughout much of the valley and some are so intensive as to be irreversible or irretrievable. The boundaries of the Wilderness Study Area include the whole of the Lava Mountains, Golden Valley, and the Almond Mountains. The northern boundary is an unimproved way and a large canyon separating the Lava Mountains from the Summit Range. Beyond the Summit Range the boundary is the large motorcycle trail which skirts the northern end of the Lava Mountains. The eastern boundary is common with the roadless area boundary. The southern boundary is Steam Well road and its extension to Blackwater Well with exclusions for old mining operations at Mountain Spring and Steam Well. The Golden Valley Road runs north from 3,200 feet and 3,400 feet along the western edge of the Lava Mountains. This is a highly visible boundary where the slopes of the Lava Mountains meet the desert floor.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

With their deep and scenic interior canyons, the Lava Mountains provide seclusion and isolation from other visitors. Vistas include large features of adjacent areas. These expanses show little significant imprint of man at these distances and lend a psychological feeling of vastness. The rolling nature of Golden Valley provides ample screening, while its orientation between two mountain systems gives the visitor an outstanding opportunity for solitude. The lack of roads and ways and the general absence of evidence of man's work upon the landscape contribute to the undisturbed quality of this portion.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 3 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Wilderness Study Area 170 is situated 7 miles northeast of the mineral-rich Randsburg mining district. The entire WSA is a Potential Geothermal Resource Area (PGRA). Located within the PGRA is the Randsburg Known Geothermal Resource Area (KGRA), containing two geothermal wells. The wells are located

3 miles northeast of Red Mountain. The WSA also contains one uranium occurrence, zeolites, feldspar, and traces of mercury within the KGRA.

Vegetation

No unusual plant assemblages occur within WSA 170. The vegetation consists mostly of creosote bush and allscale. No significant or sensitive plant species are known to occur within this WSA.

Wildlife

WSA 170 includes 13 square miles of desert tortoise populations of between 20 and 50 tortoises per square mile. The entire WSA is habitat for the State-listed rare Mohave ground squirrel; this represents approximately 1 percent of the total range of this species. Two prairie falcon eyries and one golden eagle eyrie and the associated foraging areas are located in this WSA. Golden eagle and prairie falcon eyries are located within the Red Mountains/El Paso Raptor Breeding Area. This is one of the densest known raptor breeding areas in the CDCA. Appoximately 10 percent of this area (45 square miles) is within WSA 170. One spring on the northern edge of the WSA is particularly valuable to wildlife.

Cultural Resources

The entire WSA is culturally sensitive/significant. Four archaeological districts have been nominated for the National Register of Historic Places. These include Bedrock Springs, Steam Well, Old Wells, and essentially all of Golden Valley.

Native American Uses, Needs, and Sites

No documented Native American resources are known for this WSA. The area was traditionally used by Kawaiisu, Mohaves, Pauite, and Chemehuevi. Resources are predicted to occur in the lowland areas such as the southern extension of Searles Valley and the canyon mouths and foothill area to the east and west of Searles Valley. Resources are especially likely to occur near seasonally flowing streams.

Scenic Quality

The study area has an over-all "high" scenic quality. It includes portions of three scenic quality polygons, two receiving high ratings and one receiving a medium rating. Golden Valley and the Lava Mountains dominate the scenery in the study area; both received high-medium scores for color, vegetation, and uniqueness. The Lava Mountains scored high-medium for landform, while Golden Valley scored low-medium. The high uniqueness ratings resulted from the terrain diversity and color variety in the Lava Mountains and the pleasing topography, color variety, and unique and dense vegetation in Golden Valley. A significant scenic factor common to all of the scenic quality polygons included within this study area is the absence of visual intrusions throughout.

General Recreation

This area has several highly rated and valued recreation resources. Two "high" rated interpretive sites in this WSA are Steam Well and Hamburger Mill. Two "medium" ranked interpretive sites located in the WSA are Bedrock Spring and Canyon and the Lava Mountains. Almond Mountain is the fifth and only interpretive site in this WSA that is unevaluated. Only one teaching and research site is located in this WSA; it is visited once annually on the average by college or university classes. Good rockhounding opportunities exist for green onyx, chalcedony, petrified wood, jaspagate, honey onyx, banded plume, and moss agate. Excellent quail, chukar, dove, and rabbit hunting exists in the western half of this WSA. There are both excellent and good floral opportunities. The Red Mountain Management Framework Plan identified much of this WSA as primitive area.

Range Uses and Potential

This WSA contains a portion of the Cantil Common Allotment and all of the Lava Mountains Allotment. Both are grandfathered. There are no wild horses or burros.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

An overwhelming number of comments contested the inclusion of a road in Golden Valley stating that it is, in fact, only a jeep trail. Most of the road was deleted so that it now provides access as far as Section 15 for grazing purposes but does not continue through the valley. Many comments also expressed motorized recreational interest. No competitive motorized vehicle areas are included in this Wilderness Study Area. All portions have been previously identified in BLM planning processes for their natural values and managed as such.

Study Phase

Of the 61 comments received about WSA 170, 30 favored a wilderness designation. A large majority of letters favoring wilderness designation wanted WSAs 170 and 170A combined by closing the jeep trail cutting through Golden Valley in the Lava Mountains. The scenic beauty and wildflowers were common topics, as was the desire for primitive recreation -- photography, camping, hiking, horseback riding, etc. Other wilderness qualities such as archaeologic, geologic, and nature study opportunities were mentioned.

The comments opposing wilderness designation for this area quite often mentioned grazing, military activity, and mining as activities that detract from wilderness potential in this area. The desire for multiple-uses such as geothermal, mining, motorized vehicle use, motorcycle competition, rockhounding, and grazing were common.

No comments were received in response to the Public Input Guidelines for the Wilderness Study Phase (Workbook 3/15/79).

Draft Plan Alternatives

A variety of public comments specific to WSA 170 was received in response to the Draft Desert Plan. For example, one indicated agreement with the Protection Alternative, another was in agreement with the Balanced Alternative, while a third insisted that a greater acreage be recommended as suitable for wilderness than in the Protection Alternative. Another stated that exploration for and development of oil, gas, and geothermal resources were the best uses for the area under the No Action Alternative.

SUMMARY OF RATIONALE FOR PROPOSED PLAN

Approximately 80 percent of the Golden Valley Wilderness Study Area (170) is recommended as suitable for wilderness designation. Its general quality as a wilderness resource, which is reflected in the fact that it was ranked third in relative wilderness values, was an important consideration in this decision. The area encompasses unique landforms and is relatively close to major population centers within Southern California.

Conflicts result from the fact that the area lies within a Potential Geothermal Resource Area (PGRA) and includes a Known Geothermal Resource Area (KGRA) and also overlaps part of one and all of another grazing allotment.

Based on all available resource information, it was decided that within that portion of the WSA recommended as suitable, the value of the wilderness resource exceeded the value of competing resources and that the highest and best use of the area was as wilderness.

Boundary modifications in the southwest were made to accommodate both the geothermal and recreation values. It was felt that this compromise would provide the maximum protection for the many natural and cultural resource values present and still allow for future development and recreation.

IMPACT OF PROPOSED PLAN

Approximately 20 percent has been recommended for Class M to provide for increased grazing, mineral development, and motorized recreation. Any one of these activities in the flat, open portion of Golden Valley would destroy the wilderness and scenic values.

WILDERNESS STUDY AREA 172

Red Mountain

GENERAL DESCRIPTION

The area[1] (17,460 acres) is bordered on all sides by maintained dirt roads. To the west is a pipeline road generally paralleling State Route 395. To the south is a graded two-lane dirt road connecting the mining town of Atolia with a mill site at Blackhawk Well. To the east is a dirt road between Blackhawk Well and the Brown's Ranch Road. To the north is Steam Well Road. The area is 94 percent public land. Non-public holdings consist of two separate blocks. The N1/2SE1/4 of Section 4, T 29 S., R. 41 E. has been withdrawn for a public water reserve (Executive Order 8/8/14 WDL PWR #22). This WSA contains 75 percent mountains and 25 percent hills.

WILDERNESS QUALITY

Description of Environment

The roadless area includes Red Mountain and the associated bajadas and alluvium. Elevations range from 3,500 feet at the southeast corner of the mountain to 5,261 feet at the peak. The transition between bajada and valley occurs on the east side where the valley slopes eastward to the Cuddeback drainage basin. The vegetation throughout is of the creosote bush scrub plant community. The Mohave ground squirrel, listed by the State as a rare species, is also found in the area. The Squaw Spring site has been entered in the National Register of Historic places. It contains numerous house rings, metates, petroglyphs, and other highly visible evidences of aboriginal presence.

Natural Condition

Mining occurs on the lower hills and slopes on all sides of Red Mountain. The most noticeable scar is a talc mine near Steam Well Road with highly visible white tailings. Much of the northern bajada is taken up by mining claims, but few have been extensively worked. Several access ways penetrate the area, especially along Steam Well Road, where visitors are frequent. Another road on the north runs by the talc mine, 2 miles into the area to Squaw Spring, providing access to several mining claims on the northern bajada. At Squaw Spring are the remnants of an old water system. Large concrete foundations and a large concrete storage tank still remain and are of historical interest. Several access routes appear to be maintained solely by the passage of vehicles and do not meet the definition of a road. A utility line connects the mill site at Blackhawk Well with Atolia. A small

[1]Portions of T. 29 S., R. 41 E.; and T. 30 S., R. 41 E., MDM.

building for an abandoned beacon site is located on top of Red Mountain. The area has received both organized and random use by motorized vehicles and motorcycles.

Motorcycle trails are encountered on the lower slopes and in canyons on the northern and eastern sides of the mountain where terrain will allow. A jeep trail climbs the west side to a high saddle and is substantially noticeable. Other roads penetrate the west side to mining claims in the lower canyons. Other impacts along the west side include garbage dumps and junk cars from the nearby community of Red Mountain. The central portion of the roadless area, however, retains its primeval character and influence. The boundaries of the Wilderness Study Area include all of Sections 2, 3, 4, 9, 10, (T. 30 S. R. 41 E.); Section 33 (T. 29 Sl, R. 41 E.); portions of Sections 1, 11, 12, 14, 15, 16, (T. 30 S. R. 41 E.); and, Sections 28, 32, 34, 35, 36 (T. 29 S., R. 41 E.). These sections include a rugged mountainous area where the integrity of the landscape is intact and where the forces of nature are the primary forces at work.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The canyons and hills allow penetration into the area and provide topographic screening from other visitors. Higher elevations afford outstanding views of surrounding features. These qualities provide outstanding opportunities for solitude and primitive and unconfined types of recreation. The significant ongoing human activity from adjacent communities and the various impacts of man's work which are readily apparent over much of the west side of the mountain detract from the over-all primitive recreation potential, and these portions have been largely excluded from further wilderness consideration.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 97 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

This Wilderness Study Area is located on Red Mountain, east of the Red Mountain and Randsburg Mining Districts. The known gold and silver mineralization in these nearby mining districts indicates good potential for similar mineralization within WSA 172. The WSA is partially in the Randsburg KGRA and has been classified as prospectively valuable for sodium/potassium and oil/gas by the USGS Conservation Division.

Vegetation

No unusual plant assemblages occur within WSA 172. The vegetation consists mostly of creosote bush scrub and allscale scrub. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

This small WSA (5 square miles) lies within the range of the State-listed rare Mohave ground squirrel and within an area of desert tortoise density of 50 to 100 per square mile. It represents less than 1 percent of the total range of the Mohave ground squirrel and less than 1 percent of all lands containing desert tortoise densities of 50 to 100 per square mile. Approximately 1 percent of the Fremont-Stoddard Desert Tortoise Area, one of four recognized populations of this species in California is here. One prairie falcon eyrie is located on Red Mountain making the entire WSA foraging habitat for this species. It is included in the Red Mountain/El Paso Raptor Breeding Area, one of the densest breeding areas for prairie falcons and golden eagles in the CDCA. Approximately 2 percent of this breeding area is present within WSA 172.

Cultural Resources

Four miles of high and one mile of very high sensitivity/significance are located within the WSA.

Native American Uses, Needs, and Sites

No Native American resources are currently documented for this wilderness area. However, this area is within the ancestral lands of the Kitanemuk, one of the Serrano divisions. An estimated potential resources sensitivity zone can be anticipated within the Red Mountain area, which occupies most of the WSA.

Scenic Quality

The scenic quality of this study area is "medium." The area received medium scores for color and uniqueness and low scores for landform and vegetation.

General Recreation

Squaw Spring Indian Village site has been rated as medium for its interpretive values. Excellent chukar, dove, and rabbit hunting occurs throughout the WSA. Red Mountain provides good opportunities for floral observations.

Range Uses and Potential

The WSA is in the Cantil Common Allotment. There are no wild horses or burros.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Over 50 comments were received on this roadless area. About 75 percent of those comments recommended dropping the area from further wilderness study. Most cited motorized vehicle activities and mining activities on the slopes. Of those advocating further wilderness study, the natural values of the higher areas and the opportunities for primitive and unconfined recreational activities were cited. The area was visited on the ground several times and flown over many times by the BLM wilderness field team. As a consequence, most of the areas impacted by man's activities were excluded from further wilderness study. However, the higher and steeper areas of the mountain showed little sign of man's presence or use of the area, and findings were not changed in those portions.

Study Phase

Of the 75 comments received on Wilderness Study Area 172, 61 opposed a wilderness designation.

Sights and sounds -- transmission line, vehicle traffic, lights from communities, low flying aircraft, mining, and motorized vehicle use were listed as detracting from the area's wilderness potential. Desire for mining of gold, silver, and tungsten and geothermal potential were common comments. Recreation desires, especially motorized vehicle use and camping were very common comments. Rockhounding and competitive events were also desired uses. One writer felt the area was too small to manage as wilderness, and another wanted to see a corridor designated between 170 and 174.

The letters supporting a wilderness designation indicated that the area held several wilderness qualities. Archaeologic, historic, scenic, unique flora and fauna, nature study, geologic, and cultural qualities were all mentioned. One writer felt adjacency to a highway allowed easy access for wilderness users, and another felt the area's adjacency to a tortoise preserve would provide a good buffer. Two letters suggested a boundary change of adding to the area by including the southern section.

Comments were received in response to the Public Input Guidelines for the Wilderness Study Phase (Workbook, 3/15/79). One comment opposed wilderness classification because the area was actually less than 5,000 acres and the imprint of man was substantially noticeable. Another comment suggested that wilderness should be limited to the higher elevations and existing ways should be maintained for the use of rockhound families.

Draft Plan Alternatives

A variety of public comments specific to WSA 172 was received in response to the Draft Desert Plan. For example, one was in agreement with the Protection Alternative, another expressed the need for greater acreage as suitable for wilderness than in the Protection Alternative, and a third insisted that the

entire study area should be recommended as suitable under the Balanced Alternative. Another called for deleting Golden Valley from wilderness under the Balanced Alternative. In addition, one stated that the exploration and development of oil, gas, and geothermal resources were the best uses for the Study Area.

SUMMARY OF RATIONALE FOR PROPOSED PLAN

The Red Mountain Wilderness Study Area, 172, is recommended as nonsuitable for wilderness designation. The area displays good potential for gold and silver mineralization and has been identified by USGS as prospectively valuable for minerals, oil, and gas. The Wilderness Study Area supports a portion of the Cantil Cerrano grazing allotment and in terms of recreation has been rated excellent for hunting.

Although the area is located relatively close to population centers, competing resource values and its low ranking (97) were significant considerations. It was determined that the competing values exceeded the value of wilderness and that the highest and best use of the area would be one that was less restrictive.

The site includes many natural and cultural resource values, one of which is a State-listed rare species. To protect these values while providing access for mineral exploration, grazing support, and recreation, the area was recommended for Class L designation.

IMPACT OF PROPOSED PLAN

Activities permitted under Class L designation could not be effectively mitigated because of the high visibility of the slopes and lack of vegetation. Activities would impair both the wilderness and scenic values.

WILDERNESS STUDY AREA 173

Blackwater Well

GENERAL DESCRIPTION

This triangular area (7,500 acres)[1] is bordered on the northwest by the Twenty Mule Team Borax Trail, on the south by maintained dirt roads, and on the east by the Naval Weapons Center Mojave "B" Range boundary. The area contains 97 percent public land, with only one section of non-public land. A portion of Section 2, T. 30 S., R. 43 E. has been withdrawn as a public water reserve. (Executive Order 8/8/14 WDL PWR #22). This WSA contains 55 percent alluvial fans, 40 percent lava flows, and 5 percent pediments.

WILDERNESS QUALITY

Description of Environment

The dominant physical feature is a lava mesa (3 miles long and 1 mile wide) near the center. It is oriented north-south with a flat top and steep sides of dark brown volcanic rock. Vegetation is limited to the bottom where reduced slope allows some soil to accumulate. East of the mesa is a gently sloping bajada which runs to the eastern border. Vegetation on this bajada is lush creosote scrub with dense desert shrubs throughout. West of the mesa are some low, light brown hills near Blackwater Well. Vegetation there, though quite dense, does not have an abundance of creosote. Some Joshua trees are present but do not dominate. Several archaeological camp and milling sites in the area have been recorded with the San Bernardino County Museum.

Natural Condition

Cattle grazing is the primary land use in the area. A water tank and short access road are located in the southeast corner but have little impact on the naturalness of the area. Another way separates the southeast corner from the rest of the area. This road has little impact on the primeval character of the land as it is gradually being reclaimed by the dense vegetation. A house just outside the roadless area at Blackwater Well has improvements which intrude into the western edge of the roadless area. These works of man do not dominate the landscape as they are screened by low hills immediately adjacent to the site.

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[1]Portions of T. 29 S., R. 43 and 44 E. and T. 30 S., R. 43 and 44 E., MDM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Opportunities for solitude are outstanding. The large lava mesa provides an opportunity for a variety of wilderness-oriented activities. Opportunities for primitive and unconfined types of recreation are outstanding.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 41 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Mineral prospects and/or occurrences are not reported in this WSA. Four unpatented mining claims have been reported.

Vegetation

No unusual plant assemblages occur within WSA 173. The makeup of the vegetation within the WSA consists mostly of creosote bush and allscale scrub. No sensitive or rare plant species are known to occur within this WSA.

Wildlife

The entire WSA falls within the range of the Mohave ground squirrel (State rare). This accounts for less than one percent of the species range. There is one known golden eagle eyrie within the area; the entire area is used as foraging area.

Cultural Resources

Approximately 1 square mile of very high sensitivity/significance is located in the WSA.

Native American Uses, Needs, and Sites

No Native American resources are currently documented for this WSA. The territory was occupied traditionally by the Vanyume Serrano. A concentration of potential sensitive resources is anticipated around the foothills of the Granite Mountains.

Scenic Quality

This study area rated "medium" in scenic quality. It received a low score in landform and medium scores in color, vegetation, and uniqueness.

General Recreation

No recreational resources are known to exist in this WSA.

Range Uses and Potential

The WSA falls within the PK Allotment. There are no wild horses or burros.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Most comments were general statements directed at several roadless areas in the region and addressed study phase considerations.

Study Phase

Only six comments were received on WSA 173. Of these, five opposed designating the area as wilderness. Two felt the area had too much activity to provide solitude and peace. The other three desired a multiple-use designation for grazing and motorized vehicle competition.

The one letter favoring a wilderness designation indicated that the area was scenic, had unique flora and fauna, and should be saved for the future. It was also believed that the area would provide a necessary buffer to the tortoise preserve.

No comments were received in response to the Public Input Guidelines for the Wilderness Study Phase (Workbook 3/15/79).

Draft Plan Alternatives

A variety of public comments specific to WSA 173 was received in response to the Draft Desert Plan. For example, one indicated complete agreement with the Protection Alternative, another agreed with the Balanced Alternative, while a third insisted that a greater acreage be recommended as suitable for wilderness than in the Protection Alternative. Another called for the addition of the entire study area as suitable for wilderness under the Balanced Alternative. In addition, one stated that the exploration for and development of oil, gas, and geothermal resources under the No Action Alternative were the best uses for the area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Blackwater Well Wilderness Study Area (173) is recommended as nonsuitable for wilderness designation.

This area is quite similar to the adjoining Wilderness Study Area to the south. It falls within the PK grazing allotment and, other than four claims, there is no evidence to indicate a potential for mineralization.

The area rated in the upper third in terms of relative wilderness values. Since the competing resource values were low, it was decided the highest and best use of the land would be in a less restrictive multiple-use class.

The entire area was recommended for Class L designation. This classification will protect the known natural and cultural resource values, which include one State-listed species, and permit access for exploration, recreation, and grazing facility support.

IMPACT OF PROPOSED PLAN

Since it is generally flat except for the mesa in the center, the area could not absorb some activities permitted by Class L guidelines. Mining exploration and development would impair the natural condition, as would driving on designated routes. Grazing has been permitted in the past with no significant effect on wilderness or scenic value and, if not increased, could continue without loss.

WILDERNESS STUDY AREA 173A

Grass Valley

GENERAL DESCRIPTION

The area[1] (14,000 acres) is bordered on the north by a maintained dirt road from Black Water Well into China Lake Naval Weapons Center. The western and southern boundaries are also maintained dirt roads. The eastern border is the Fort Irwin Military Reservation boundary. The area is entirely public land with the exception of approximately a quarter section of non-public land along the southwest boundary. A portion of section 2, T. 30 S., R. 43 E., has been withdrawn as a public water reserve. (Executive Order 8/8/14 WDL PWR #22). This WSA contains 45 percent alluvial fans, 45 percent pediments, and 10 percent hills.

WILDERNESS QUALITY

Description of Environment

The area includes Grass Valley and a series of scattered, abrupt hills which are referred to locally as the "Parachutes." The hills are reddish brown to yellow in appearance. From the desert floor at approximately 3,600 feet, these hills reach a maximum elevation of 4,687 feet. The valley supports a creosote scrub plant community with a scattering of Mojave yucca.

Natural Condition

The area retains its primeval character throughout. Cattle grazing is the only activity from which the effects are substantially noticeable. An allotment fence and a road to a stock watering tank enter the area from the north near the northeast corner. Other ways in the area are being reclaimed by the dense desert vegetation, which is lush throughout the area. The boundaries of the Wilderness Study Area are common with the boundaries of the roadless area.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The thick vegetation provides ample screening of visitors from one another, while the hills themselves provide good hiking and visual variety in the landscape. Opportunities for solitude are outstanding as are opportunities for unrestricted movement.

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[1]Portions of T. 30 S., Rs. 43 and 44 E.; and T. 31 S., R. 44 E., MDM.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 105 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

No Mineral prospects and/or occurrences have been reported in this WSA. The local lithology of rhylitic plugs in granitic rocks may create a potentially favorable environment for porphyry-type copper occurrences.

Vegetation

No unusual plant assemblages occur within WSA 173A. Vegetation within the WSA consists mostly of creosote bush scrub and allscale scrub. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

The habitat is basically creosote scrub and some Mojave yucca. Key wildlife values include 20 square miles of desert tortoise habitat with densities of 20 to 50 tortoises per square mile. There are also 15 square miles of golden eagle foraging habitat. The entire WSA is within the range of the State-listed rare Mohave ground squirrel. This represents less than 1 percent of the total range of this species.

Cultural Resources

Two square miles of very high sensitivity/significance are located in WSA.

Native American Uses, Needs, and Sites

No Native American resources are currently documented for this wilderness area. Traditionally, this was Vanyume Serrano territory. A potential resource concentration area is anticipated within the Grass Valley area.

Scenic Quality

The study area contains portions of two scenic quality polygons and has an overall "medium" scenic quality rating. The bulk of the area lies within the Cuddeback Lake polygon, which received a low-medium score for landform and medium scores for color, vegetation, and uniqueness.

General Recreation

No recreation resources are known to exist within this WSA.

Range Uses and Potential

Range resources are the same as those discussed in WSA 173.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments received did not substantiate lack of natural condition.

Study Phase

Only one comment was received on Area 173A. The letter opposed a wilderness designation for fear it would prohibit grazing in the area.

No comments were received in response to the Public Input Guidelines for the Wilderness Study Phase (Workbook, 3/15/79).

Draft Plan Alternatives

A variety of public comments specific to WSA 173A was received in response to the Draft Desert Plan. For example, one indicated complete agreement withn the Protection Alternative, another agreed with the Balanced Alternative, while a third insisted that a greater acreage be recommended as suitable for wilderness in the Protection Alternative. Another called for the addition of the entire study area as suitable for wilderness under the Balanced Alternative. In addition, one stated that the exploration and development of oil, gas, and geothermal resources under the No Action Alternative were the best uses for the area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Grass Valley Wilderness Study Area, 173A, is recommended as nonsuitable for wilderness designation.

This area falls within the P.K. grazing allotment and at this time there is no evidence to indicate a potential for mineralization exists. The Wilderness Study Area fell in the lower quarter of all study areas in terms of its relative wilderness value. It did not possess any of the values outlined as desert-wide wilderness opportunities. Since the competing resource values were low, it was decided that the highest and best use of the land would be in a less restrictive multiple-use class.

The entire area was recommended for Class L designation. This will protect the known natural and cultural resources values, which include one State-listed species and still permit access for exploration, recreation, and grazing facility support.

IMPACT OF PROPOSED PLAN

The area was recommended for Class L. It is generally flat with a few low hills. Lacking terrain diversity and vegetative cover, most activities permitted under Class L could not be localized. Impacts resulting from mining and ORV use on designated roads would impair the wilderness and scenic values.

WILDERNESS STUDY AREA 186

Black Mountain

GENERAL DESCRIPTION

The boundary of the Wilderness Study Area, beginning at the southern end of Black Canyon, runs southeast along the lower edge of the basalt face of Black Mountain to the southeast limit of this volcanic flow. From this point the boundary runs due north approximately 3.25 miles to a lava canyon in Section 28. The boundary then runs generally northwest through the canyon and along the basalt faces to Black Canyon Road. Black Canyon Road forms the western boundary.

This WSA contains 75 percent lava flows, 10 percent dissected fans, 10 percent fans, and 5 percent hills.

WILDERNESS QUALITY

Description of Environment

The area encompasses Black Mountain, Opal Mountain, and portions of Superior and Water Valleys. Black Mountain consists of a large area of exposed basalt rising approximately 1,900 feet from the desert floor. The mountain is nearly black, with sparse shrub vegetation where accumulation of soil occurs. The south side of this flat-topped mountain rises abruptly from the alluvium north of Harper Lake, as does the west side from Black Canyon. The northern and eastern sides fade more gradually with systems of basalt dikes, ending at Superior Valley and the Opal Mountain areas. At the southeastern corner of Black Mountain is a deposit of fine-grained Holocene dune sand blown from Harper Lake. The dune is striking in contrast to the nearly black basalt of Black Mountain.

Natural Condition

Imprints of man's work occur in a rather localized area. A series of ways intrude from the southeast corner as access to the Opal Mountain area. This is a favorite recreation area and these impacts are substantially noticeable. This corridor of access continues on to the northwest to connect with the Black Canyon Road. The area north and east of Opal Mountain, though relatively undisturbed by man, does not contain 5,000 acres of contiguous public land. The area associated with Black Mountain does contain 5,000 acres of contiguous public land as it encompasses a portion of the transition zone between two different ownership patterns and retains its primeval character.

Outstanding Opportunities for Solitude
or a Primitive and Unconfined Type of Recreation

The uplifted basalt area of Black Mountain provides isolation and outstanding opportunities for solitude as screening is provided by the series of ridges and canyons across the flow. The diversity and uneven surface provide outstanding opportunities, as well, for a variety of primitive and unconfined recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 53 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Known resources in this area include a zeolite deposit, located in the northernmost part of the area, a uranium locality, and jasper veins located at the mouth of Black Canyon. Within the sedimentary rocks along the edges of the WSA there is potential for economic deposits of uranium. There is also potential for deposits of pumicite (a salable mineral), bentonite, and magnesite. Speculative potential exists for oil and gas (leasable resources). There is also moderate to low potential for the development of zeolites. The jasper is mined primarily by rockhounds. In this area, no unpatented claims have been filed with the BLM.

Vegetation

No unusual plant assemblages occur within WSA 186. Vegetation within the WSA consists mostly of creosote bush scrub. No sensitive or significant plant species are known to occur within this WSA although the potential exists for the occurrence of Eriophyllum mojavense. Its habitat occurs within the WSA, and a collection site occurs a few kilometers south.

Wildlife

This WSA is located in the vicinity of Black Mountain northwest of Barstow, California. The topography is varied and includes deposits of black obsidian rock, contrasting sharply with light brown aeolian soils. Dominant vegetation consists of creosote bush-burrobush scrub with occasional scattered Joshua trees. A variety of important wildlife species is present within this area. These include the state-listed Mohave ground squirrel, present over 17 square miles and BLM sensitive desert tortoise, present over the entire area at densities of 20 to 50 per square mile. Fourteen square miles are located within the Fremont-Stoddard Desert Tortoise Area, one of four concentrations of this species in California. Approximately 1 percent of the Feemont-Stoddard Desert Tortoise Area is present in this WSA. A single golden eagle eyrie is located on Black Mountain; Opal Mountain supports one prairie falcon eyrie. Both pairs of raptors use approximately 20 square miles of foraging area within this WSA.

Curtural Resources

The entire WSA falls within an area of very high cultural resources sensitivity/significance.

Native American Uses, Needs, and Sites

Most of the WSA is an area of various rock art and temporary camp sites in association with aboriginal trails. The Black Hills represent an area of mythological significance to the Mohave. Opal Mountain and Black Canyon are of mythological importance as well (Kroeber, 1925, 1919).

Scenic Quality

Although the study area consists of portions of two scenic quality polygons, it is dominated by Black Mountain, which received medium range scores for landform, color, vegetation, and uniqueness. Excellent views of surrounding mountains and valleys, including both Harper and Superior Dry Lakes, enhance the scenic quality of the area. The overall scenic quality rating for the study area is "medium."

General Recreation

Black Mountain basalt flows have been ranked medium for their interpretive values. Opal mine, or Scouts Cove, is an unevaluated pit mine interpretive site in this WSA. Good rockhounding opportunities for opalite, agate, and blue opal are located within this WSA. Quail and deer hunting is rated fair in this WSA. Good floral display opportunities exist on Black and Opal Mountains. Approximately 3,000 visitor use days occurred in two concentrated use zones in this WSA in 1978. Camping and rockhounding are the primary activities in these zones. A designated Outstanding Natural Area and Natural Environment Area are located within this WSA.

Range Uses and Potential

This WSA falls into the Superior Valley Allotment. No wild horses or burros occur here.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Most comments received expressed interest in various types of recreation in the area, such as rockhounding. None of the mentioned access routes is affected by the Wilderness Study Area boundaries.

Study Phase

Eleven letters were received on WSA 186. Ten of the eleven opposed wilderness designation for the area. Many mentioned sights and sounds that detract from the area's wilderness potential: roads, mines, lights of Hincley

and Barstow, campsites, structures, motorized vehicle use, and low aircraft. Several noted the large amount of private checkerboard land in the area which if developed, could drastically reduce the area's wilderness potential. Recreation desires, rockhounding, motorized vehicles, and camping were discussed. One letter noted that only experienced mountain climbers should attempt the Basalt Cliffs. Mineral and geothermal potential were other opposition concerns. One letter noted that the ICMP already designated the area as designated roads and trails -- and it should stay that way.

The one letter supporting wilderness designation for the area mentioned the large amount of desert animals residing here, along with an endangered species of cactus, Sclerocactus Polyancistnus, all of which should receive protection under a wilderness designation.

Some responses were received in response to the workbook. The commenters wanted the area's cultural resources protected, but were not sure if wilderness was the only means of protection.

Draft Plan Alternatives

The comments received in response to the Draft Desert Plan were generally divided between a desire for wilderness designation and maintaining the area as a collecting area for rockhounds. If the site is designated as wilderness, access on designated roads should be retained to support rockhound activities. One comment recommended that the area be left alone (No Action Alternative).

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 186, Black Mountain, is recommended as nonsuitable for wilderness designation.

The area is known to contain a variety of mineral deposits and is potentially rich in many more. It is also included in the Superior Valley grazing allotment.

Historically a very popular area for general recreation, motorized and nonmotorized, it has been rated as good for rockhounding and fair for hunting. Camping and rockhounding are popular activities.

Although it is close to metropolitan Los Angeles, its relatively low ranking (53) and its acknowledged value as a general recreation resource were prime considerations. It was determined that these factors, plus its mineral value, were of greater significance than its wilderness value.

The entire area was recommended for Class L designation. The WSA falls within an area of very high cultural resource sensitivity and the site supports golden eagle and prairie falcon eyries and foraging areas. The Class L designation would provide the protection necessary to insure the preservation of both the cultural and natural resources.

IMPACT OF PROPOSED PLAN

The Class L designation would result in local impacts to the natural condition and solitude. The degree of impact would generally be related to topography. In those areas where the terrain is rugged, impacts, with the exception of support roads, would be localized. Where the landform is more gentle, even with mitigation, development would result in a greater loss of wilderness quality.

WILDERNESS STUDY AREA 206

Newberry Moutains

GENERAL DESCRIPTION

The area (28,800 acres)[1] is bordered on the north by flood control ditches, which run parallel to Interstate 40. The western border is made by a natural gas pipeline and Camp Rock Road. The southeastern border is formed by a gas pipeline. From its junction with Camp Rock Road, this pipeline runs northeast through Kane Wash until it emerges into the edge of Mojave Valley. It then turns and runs just north of true east, finally reaching its intersection with the northern border at a very shallow angle, approximately 9 miles east of the Newberry Mountains. The area is approximately 69 percent public lands with non-public holdings occurring in north-south strips of alternating sections. There is a legal right of way for a pipeline across Sections 26 and 35, T. 9 N., R. 1 E., running north-south. Also, records indicate a recent application for an additional, parallel pipeline to be constructed in the same area. The NE1/4 of the SE1/4, Section 31, T. 7 N., R. 3 E., has been withdrawn for public water reserve purposes. This WSA contains 70 percent hills, 15 percent alluvial fans, 10 percent dissected fans, and 5 percent highly dissected fans.

WILDERNESS QUALITY

Description of Environment

The major feature of the area is the Newberry Mountain system. These mountains rise to a height of 4,800 feet from the desert floor to the north, which lies at approximately 2,400 feet. Of volcanic origin, the main block of mountains consists of a series of parallel north-south ridges extending onto the alluvial fan, which forms the southern slope of the Mojave River Valley. The elongated eastern finger of the area includes a portion of the Troy Lake depression and sinks to less than 1,800 feet. With the exception of a small area of alkali sink scrub at Troy Lake, the area is of the creosote scrub plant community.

Natural Condition

This area contains large portions which generally appear to have been affected primarily by natural forces, with man's imprint substantially unnoticeable. However, small portions do contain structures or man-made influences which detract from the apparent naturalness and have been excluded from the Wilderness Study Area. On the east side of Camp Rock Road, approximately 7 miles south of Daggett, is the Azucar mine and a patented

[1]Portions of T. 7 N., Rs. 2 and 3 E.; T. 8 N., Rs. 1 and 2 E.; and T. 9 N., Rs. 1, 2, and 3 E., SBM.

mining claim in Section 13 (T. 8 N., R. 2 E.). This is a rather large-scale mining operation with several structures and permanent residences. The mine lies in a small bajada surrounded by the Newberry Mountains. The town of Newberry Springs lies at the northern tip of the mountains. Other facilities associated with the town include several rock quarries and small-scale mining around the base of the mountains. Land in the elongated easternmost extension of the area is largely in private ownership. There are several dwellings and a pumping station located in this area, which substantially alter the primeval character of the land. Boundaries of the Wilderness Study Area are common with the boundaries of the roadless area west of Newberry Springs and Kane Spring, with the exception of the small, well-screened bajada at Azucar mine. The imprint of man's work is substantially noticeable here. The eastern boundaries of the Wilderness Study Area diverge from the roadless area boundary approximately 1-1/2 miles east of Kane Spring and follow an unimproved way in Kane Wash north. From this point the boundary is drawn northwest through Sections 28, 29, 20, 17, 8, 7, and 6 (T. 8 N., R. 3 E.) to the roadless area border approximately one-half mile west of Newberry Springs. These boundaries exclude extensive facilities around Newberry Springs and in the elongated eastern portion of the roadless area.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The area contains an extensive and complex system of ridges and canyons associated with the Newberry Mountains. These features provide isolation from the sights and sounds of society, as well as visual screening from other visitors. Outstanding opportunities for solitude are available throughout. The challenging topography and the size provide outstanding opportunities for primitive and unconfined recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 44 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Within this area the Lucky Don Juan mine (Sec. 33, 28 T. 8 N., R. 3 E.) has been explored for gold, tungsten, and uranium. There are numerous prospects in Sections 6 and 20, T. 8 N., R. 3 E. and Section 9, T. 8., R. 2 E. The mines and prospects in the vicinity of the Azucar gold mine have barely been excluded from the WSA.

There is potential for buried deposits of borates on the north slope of the Newberry Mountains. The area of highest mineral potential is the Lucky Don Juan mine area. Generally, the rock types here are similar to the Calico Mining District; however, the mineral potential of the area cannot be evaluated without field examination.

Vegetation

No unusual plant assemblages occur within WSA 206. Vegetation within the WSA consists mostly of creosote bush scrub and some allscale scrub. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

This WSA is contained in the Newberry Mountains, approximately 20 miles southeast of Barstow. The mountains are composed of black and gray weathering volcanic rock forming a series of steep ridges with sparse vegetation. Canyons and lower mountain slopes are also highly eroded. Elevation ranges from 1,800 feet in the southeastern portion of the WSA to 4,800 feet near the mountain crest. Vegetation throughout the area is dominated by creosote and burrobush. The mountain range is usually dry, with few water sources. Two springs are located in the area, however.

The Newberry and Granite Mountains support one of seven core raptor breeding areas in the CDCA known to contain relatively high densities of prairie falcon and golden eagle eyries. It was one of two such areas recommended for ACEC status by the BLM staff. It has been recommended for development of a habitat management plan (HMP) in the Draft Plan Alternatives. Approximately 3 percent of this total area is located within WSA 206. This WSA contains two eyries and approximately 30 square miles of potential foraging area used by two nesting pairs of prairie falcons. Two golden eagle eyries and approximately 35 square miles of potential foraging area are also located here.

The Newberry Range formerly supported a population of desert bighorn sheep; this herd has, however, been extirpated in historic times. Approximately 85 percent of this former range is located within WSA 206. The California Department of Fish and Game has recommended this area as a potential reintroduction site, given careful management of water supply and restrictions on incompatible uses, such as hunting.

Cultural Resources

An area of approximately 1 square mile of very high sensitivity/significance is located in the WSA. This is part of the Rodman Mountains National Register District.

Native American Uses, Needs, and Sites

The proposed WSA lies within territory traditionally occupied by the Serrano. Occasional use has been indicated by both Chemehuevi and Mohave.

Scenic Quality

This study area has a scenic quality rating of "high." It received medium scores for landform and vegetation and high scores for color and uniqueness. The high uniqueness rating is attributable to the diverse and visually unique

landforms in the area in association with the color variety displayed in the rocks and soils. Unique scenic features located within the area consist primarily of highly colorful rock formation.

General Recreation

The Newberry Mountains Indian caves are rated high for their interpretive values. Numerous artifacts were found in these caves. The entire area provides excellent quail, rabbit, and chukar hunting opportunities. Along the western boundary are good floral display opportunities.

Range Uses and Potential

The WSA contains a portion of the Ord Mountain Allotment. No wild horses or burros are found here.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

The many comments received recognized the natural values of the area, with the vast majority supporting the findings.

Study Phase

Of the 25 comments received on WSA 206, 16 supported wilderness designation for the area. Scenic quality was the most common comment supporting wilderness. Wildflowers, smoke trees, pipkin cindercone, foxes, coyotes, and rabbits were specific flora and fauna suggested for protection. Volcanic flows, dunes, and Indian burial grounds were other values noted for protection. Primitive recreation opportunities (backpacking, hiking, sightseeing, photography, rockhounding) were mentioned. One letter stated that the Boy Scouts often climb to Newberry Peak. Several letters suggested boundary alterations. One suggested moving the Deer Tank fence back to the road. Another suggested extending the boundaries east to include the roadless region north of the gasline road. And another felt the wilderness boundary was too close to the highway and should be cut back. The area's nearness to Barstow and coastal populations was commonly noted as increasing its wilderness potential.

The letters opposing wilderness designation often mentioned sights and sounds as detracting from the area's wilderness quality. Nearness to Newberry Springs, Highway 40, the county dump site, and mining operations were specifically mentioned. One letter spoke of the railroad's need for motorized vehicle access to maintain itself. Desire for grazing, mining and recreation (motorized vehicle use, rockhound, hunting, and camping) was shown. One letter urged continued access to historic sites for everyone's enjoyment but protecting these sites with rangers.

Many responses were received in response to the workbook. One commenter thought the area should become wilderness to protect the wilderness values

and archaeological resources. Some comments opposed wilderness designation because the area did not qualify and was best suited for uses other than wilderness. A few comments requested boundary adjustments to allow the continuation of conflicting uses.

Draft Plan Alternatives

The following range of public comments specific to WSA 206 was received in response to the Draft Desert Plan. Some agreed with the Use Alternative's recommendations. Another insisted that all lands within 1 mile of Interstate 15 should be recommended as nonsuitable for wilderness under the Balanced Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSAL PLAN

Approximately 90 percent of the Newberry Mountains Wilderness Study Area (206) is recommended as suitable for wilderness designation.

There is potential for mineral resources in the area but the extent is undetermined. Rock types are similar to other nearby mining areas but a more complete evaluation is required.

This WSA rated in the upper half (44) of all areas under study and was also identified as being one of the "close-in" areas. This satisfies one of the criteria specified under the desert-wide wilderness objectives. It was determined that wilderness values exceeded those of competing resources. The northern border was moved in to exclude water diversion dikes which parallel Interstate 40.

IMPACT OF PROPOSED PLAN

Class C designation should preserve all wilderness values.

WILDERNESS STUDY AREA 207

Rodman Mountains

GENERAL DESCRIPTION

The southern boundary of the area (32,800 acres)[1] is the northern edge of the utility right of way which contains power transmission lines. This boundary is located along a line 400 feet north of the three existing transmission lines (except where a service road may extend outside the right of way). To the east, a maintained dirt road used as access to the Silver Bell mine is the area border. The western boundary is a maintained dirt road between Camp Rock Road and Kane Spring. To the north, the boundary is a gas pipeline maintenance road. The area is approximately 69 percent public lands. Non-public holdings occur in north-south strips of alternating sections. The NE1/4, Section 3, T. 7 N., R. 3 E., and NE1/4, Section 18, T. 7 N., R. 4 E., have been withdrawn for protection of the recreation and public values by the Public Land Order 5224. The records indicate there are a number of recorded mining claims in the southeastern portion of the study area. This WSA includes 45 percent hills, 25 percent alluvial fans, 15 percent lava flows, 5 percent highly dissected fans, and 5 percent dissected fans.

WILDERNESS QUALITY

Description of Environment

The area encompasses the Rodman Mountains and minor alluvial formations at the northern and southern ends. The Rodman Mountains consist of an extensive series of ridges ascending from 2,900 to 3,000 feet near the northern alluvial slope of the Mojave Valley to 4,906 feet on Pipkin Cindercone near the southern end of the area. A surrounding lava flow nearly bisects the area from northwest to southeast. This lava flow forms a mesa sloping gently to the northwest and has cliff-like sides with deep canyons along the perimeter. At several points along this perimeter, drainage channels flow over the escarpments, creating spectacular waterfalls during wet seasons. The creosote scrub community is represented on the alluvial slopes, while a transitional type, indicating the Joshua tree woodland association, is evident at higher elevations. South of Target Peak, the mountains drop sharply to 4,200 feet and slope toward Johnson Valley. Several low hills in the far southwest corner of the area seem more closely associated with the northern end of the Fry Mountains than the Rodman Complex.

[1]Portions of T. 7 N., Rs. 3 and 4 E., and T. 8 N., Rs. 3 and 4 E., SBM.

Natural Condition

Man-made facilities are present over portions of the area. Large-scale mining activity has occurred in the southwest portion in the area north and west of Camp Rock Mine. These are located in low, scattered, highly eroded hills between the Rodman Mountains and Newberry Mountains and are highly visible scars upon the landscape. A dirt road, which is not maintained, leads to Pipkin Cindercone from the base of Target Peak. An abandoned cinder mine is located on the cinder cone. Apparatus associated with the mine still remains. Diggings from the mine are visible and are a major scar, as the disturbed areas have altered the shape and color of the cone. Some random vehicle tracks occur across the lava flow, but not to a degree which would make rehabilitation impractical. The Pipkin Cindercone is excluded from the WSA.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreatiion

Several aspects of the area enhance outstanding opportunities for solitude. Higher elevations offer outstanding vistas of the Mojave River Valley, Troy Lake depression, Newberry Mountains, Alvord Mountains, Cady Mountains, and Pisgah Crater and lava beds. The deep canyons provide screening and isolation from other visitors. The topography of this area is varied and scenic, providing outstanding opportunities for primitive and unconfined recreation. Various degrees of challenge are offered, with areas of geological and historical significance. Surprise Canyon contains many examples of rock art in the form of petroglyphs, as do rocks around the Deep Tank area. Of interest geologically are the cinder cone, lava flow, and eroded cliffs along the perimeter of the volcanic mesa. These are areas where man's work dominates the landscape and have thus been excluded from the Wilderness Study Area boundaries. The boundaries of the WSA are common with the roadless area boundaries along the northern, eastern, and southern borders to Pipkin Cindercone. The cone is excluded and the boundary is again common to a point approximately one-half mile east of Camp Rock mine. The boundary runs north from Camp Rock mine through a wash and way to the northern boundary.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 52 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

In the eastern part of WSA 207 silver has been produced at the Silver Bell mine. North and west of the Silver Bell mine there are numerous copper prospects. This area is lithologically similar to silver deposits in the Calico Mountains. Gold has been prospected at the Rising Sun mine in the NE1/4, Section 23, T. 7 N., R 4 E. On the west side at the Lucky Don Juan

mine (Sec. 33, T. 7 N., R. 3 E), gold, tungsten, and uranium have been prospected.

The Miocene sediments which are exposed in this area have yielded borates in the Calico Mountains and western Newberry Mountains nearby. This WSA has moderate potential for economic deposits of silver, gold, tungsten, molybdenum, and uranium.

Vegetation

No unusual plant assemblages occur within WSA 207. Vegetation within the WSA consists mostly of creosote bush scrub. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

This WSA includes 11 square miles of former bighorn sheep range. This includes approximately 25 percent of the former Rodman Mountains bighorn sheep herd range; the herd has become extirpated during historic times.

One golden eagle eyrie, two prairie falcon eyries, and the associated foraging habitats encompass the entire 55 square miles of this WSA. This includes approximately 5 percent of the Granite-Newberry Mountains Raptor Breeding Area, one of seven core areas known to contain relatively high densities of prairie falcons and golden eagles.

Two springs near the center of this WSA are particularly valuable to wildlife.

Cultural Resources

An area of approximately 30 square miles of very high sensitivity/significance is located in this WSA.

Native American Uses, Needs, and Sites

This WSA incorporates an area of traditional Serrano collection in the central part of the WSA. An historic Kawaiisu mesquite bean collection area occupies the most extreme northeast tip of the WSA.

Scenic Quality

This study area includes portions of two scenic quality polygons but is dominated by the Rodman/Newberry Mountains polygon, which received medium scores for landform and vegetation and high scores for color and uniqueness. The "high" uniqueness rating is attributable to the diverse and visually unique landforms in the area in association with the color variety displayed in the rocks and soils. Unique scenic features located within or adjacent to the study area include the Pipkin Cindercone and associated lava flows. Overall, the area received a "high" scenic quality rating.

General Recreation

Pipkin Cindercone is a well-formed cinder cone with a lava river; both are well preserved. Petroglyphs and Native American burial grounds are located in the rocky hills to the east of the lava. This site is rated medium for its interpretive qualities.

Up to four visits annually by pre-college, college, and university classes are made to a single known teaching and research area.

Excellent quail, rabbit, and chukar hunting are available throughout most of this WSA.

Natural Environment Area designation has been assigned to portions of this WSA.

A little-used concentrated use zone exists within this WSA. Activities such as hiking, sightseeing, and picnicking are the primary recreational pursuits in the zone. This zone accounted for 443 recreational visitor use days in 1978.

Range Uses and Potential

The WSA is in a proposed allotment, which is not grandfathered. There are no wild horses or burros here.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Most comments agreed about the presence of solitude and uniqueness of the terrain.

Study Phase

Of 38 comments received on WSA 207, 22 opposed designating the area wilderness. Most of these letters noted sights and sounds as detracting from the area's wilderness potential. The sights and sounds noted were mines, transmission lines, Naval training area, motorized vehicle use, Highway 40, and the Marine Corps Training Center. Recreational needs discussed were camping, hiking, motorized vehicle use, and rockhounding. The area's ICMP designation was discussed. Mineral potential was mentioned, specifically garnet, barite, lead, gold, silver, iron, the minerals in Rodman Mountains, and the site at the lava flow. Access concerns were also noted by grazers, the railroad, and those desiring access to petroglyph sites.

The comments favoring wilderness designation often spoke of scenic and unique sites that should be protected, such as the lava flow and petroglyphs. Wildflowers, coyotes, rabbits, kit fox, smoke trees, and air quality were also mentioned for protection. Geologic, educational, and archaeologic qualities were noted. Desire for primitive recreation, such as hiking and

backpacking, were expressed. The area's nearness to coastal and Los Angeles populations heightened its wilderness potential for some commenters. Inclusion of the Rodman Flow and combining this area with WSA 213 were boundary alterations suggested.

Some replies were received in reponse to the workbook. Comments referred to the area's extensive mineral potential and objected to wilderness classification. The U.S. Navy opposed wilderness designation because the Marine Corps training activities at Twentynine Palms and the use of aircraft and exploding ordnance would be restricted or terminated. Otherwise, noise pollution, ground tremors, and safety problems within a wilderness area would continue.

Draft Plan Alternatives

A public comment in agreement with the Use Alternative's recommendations for WSA 207 was received in response to the Draft Desert Plan.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Approximately 60 percent of the Rodman Mountains WSA (207) is recommended as suitable for wilderness designation.

The area has a history of mining and a moderate potential for the discovery of economic deposits of many minerals. Recreation in the area is varied and includes education, hunting, hiking, sightseeing, and picnicking.

The Wilderness Study Area ranked 52 relative to the other areas studied. In terms of the desert-wide wilderness objectives, the nearness of the site to the Los Angeles metropolitan area enhanced its wilderness value. It was decided that the highest and best use of the area would be as wilderness.

Boundaries were modified in the north and brought into Box Canyon Road in the east. The area which was excluded from the suitability recommendation was placed in Class L to protect the Native American resources in the northeast portion and the scenic quality.

IMPACT OF PROPOSED PLAN

The Class L designated area may suffer some adverse impacts to naturalness and solitude, particularly in the flat areas at the north end of the WSA. Mineral development at the east end of the WSA may be absorbed with minimal impact in this more rugged and previously impacted terrain.

WILDERNESS STUDY AREA 217

Bighorn Mountains

GENERAL DESCRIPTION

The area (58,500 acres)[1] is bounded mostly by roads to developments on non-public lands. The only boundary routes not related to homesteads include portions of the paved part of Pipes Canyon Road, portions of State Route 247, and the road to the Akron Silver Reef and Lester Mines. The San Bernardino National Forest RARE II area forms the western boundary. The area consists almost entirely of public land. Non-public lands are widely scattered and account for less than 10 percent of the total area. There are a number of recorded mining claims scattered throughout the area. This WSA contains 50 percent hills, 20 percent pediments, 10 percent alluvial fans, 10 percent dissected fans, 5 percent mountains, 3 percent plateaus, and 2 percent highly dissected fans. Most soils in this WSA are highly sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

The area encompasses a wide variety of vegetation types, ranging from yucca, cactus, and creosote to pinyon-juniper and even ponderosa pine forests. Some of the world's largest Joshua trees are found around the Mound Springs area in the southwest corner. Landforms vary from granitic "boulder piles" and craggy peaks to enclosed interior valleys and broad desert bajadas.

Natural Condition

The Bighorn Mountains remain affected primarily by natural forces and are free from man's impact. Although the area contains many pristine sites and is of sufficient size to be undisturbed by man, a few isolated sites do contain man's imprint. Primitive ways are located in some of the canyons, including the canyon that contains Guager Springs. This unimproved route penetrates more than 10 miles into the heart of the area, with numerous branch routes leading to inactive mines and old shacks. The ways presently appear to be maintained solely by the passage of vehicles. Their locations, in the canyon bottoms where they experience periodic washouts, make the effect on the natural character of the entire area insignificant. The boundaries of the Wilderness Study Area are common with the roadless area boundary along the Forest Service border from the southwest corner of Section 10 (T. 2 N., R. 3 E.) to the Lester mine and north along the western boundary to Section 2 (T. 3 N., R. 2 E.). The boundary continues east to the

[1]Portions of Ts. 2 and 3 N., Rs. 3, 4, and 5 E., SBM.

Rattlesnake Spring Road and continues just south of Rattlesnake Spring and Two Hole Spring along the base of the mountains through Sections 16, 15, 14, 23, and 24 (T. 3 N., R 3 E.); Sections 19, 30, 29, 28, 27, 26, 35, and 36 (T. 3 N., R. 4 E.); and Sections 6, 5, 4, 9, 10, 15, 21, 28, and 33 (T. 2 N., R. 5 E.). The boundary encircles Flat Top and Black Lava Butte, excluding non-public Sections 24, 25, and 36 (T. 2 N., R. 4 E.). The boundary continues through Sections 13, 14, and 15 (to exclude Parson Ranch) 22, 27, 34, 33, 32, 31, and 30 (T. 2 N., R. 4 E.); and Sections 25, 24, 14, and 15 (to exclude the Mound Spring area) (T. 2 N., R. 3 E.). These boundaries encompass a large area where the works of man are substantially unnoticeable.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The variety of terrain and vegetation offers unlimited numbers of secluded areas where a visitor can have outstanding opportunities for solitude. The area's topographical and vegetative diversity also provide outstanding opportunities for a primitive and unconfined type of recreation. In addition, the adjacent San Bernardino National Forest RARE II area provides adjacent features of interest.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 26 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has known potential for uranium and thorium and possible potential for metals (gold, manganese, tungsten) and geothermal resources (in the west end). There are over 800 claims recorded. The entire WSA is now designated small-tract classified.

Vegetation

No unusual plant assemblages occur within WSA 217. Vegetation within the WSA consists mostly of creosote bush scrub, blackbrush scrub, sagebrush scrub, and California juniper-one leaf pinyon woodland. Only one rare species, Erigeron porishii, occurs within WSA 217.

Wildlife

Twenty-one square miles of former bighorn sheep range are in this WSA, as are 5 square miles of desert tortoise habitat, with up to 20 to 50 tortoises per square mile. The bighorn range represents that used by a population of sheep in the Bighorn Mountains which has become extirpated in historic times. Sixteen springs in the area provide excellent opportunities for wildlife watering.

Cultural Resources

Within the proposed WSA are several zones of cultural resources sensitivity/ significance.

Native American Uses, Needs, and Sites

No Native American resources are currently reported for this wilderness area. Traditional residents were the Pass Cahuilla and Serrano. Anticipated resources could occur in canyons and mountains of the WSA such as Rattlesnake Canyon, Black Mountain, and the Bighorn Mountains.

Scenic Quality

The study area has an overall scenic quality rating of "high." It is dominated by the Bighorn Mountains, which received medium scores for landform, color, and uniqueness and a high score for vegetation. These mountains serve as a natural scenic backdrop viewed from State Route 247, Old Woman Springs Road.

General Recreation

Rattlesnake Canyon is a scenic portion of the Bighorn Mountains and is rated medium for its interpretive qualities. College and university classes visit one teaching and research site up to four times annually.

Excellent floral display opportunities abound along Old Woman Springs Road between Yucca Valley and Lucerne Valley. Portions of this WSA are designated as Natural Environment Area.

Range Uses and Potential

The WSA contains the Rattlesnake Canyon Allotment (grandfathered) and a proposed expansion of that allotment (non-grandfathered). No wild horses or burros are found here.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

A variety of comments are on file. Many indicated ongoing uses and private lands which have now been excluded from the Wilderness Study Area. Many comments recognized the natural values noted in the findings.

Study Phase

Of 61 letters received on WSA 217, 40 opposed wilderness designation. Most were equally concerned with sights and sounds and recreation. Specific sights and sounds mentioned were mines, range facilities, aircraft, motorized vehicle use, and wells. Desire was noted for recreation such as motorized vehicle use, rockhounding, photography, land sailing, and camping. The area was felt to be an excellent endurance area and nice for winter recreation. Johnson Valley access for bikers was discussed in one letter. Access for the elderly and handicapped was discussed. Mining concerns also showed considerable attention to mine access. Mineral potential for lead, silver, gold, and tungsten was also discussed.

The letters favoring wilderness designation for the area often mentioned the area's contiguity to Rare II lands as heightening the area's wilderness potential. Pinyons, junipers, Monardella robisonii, yucca and Joshua, the legless lizard, tree frog, red diamondback rattlesnake, deer and bear were specific plants and wildlife named for protection consideration. Preservation of air quality and scenic quality was urged. Geologic, educational, and primitive recreation opportunities were discussed. The area's transitional character from desert to mountain was seen by several letter writers as a unique ecosystem range well worth protecting. The area's nearness to Los Angeles and San Diego populations was seen as heightening the area's wilderness potential for some. Boundary alterations were suggested. One letter suggested consolidating land holdings of WSAs 217, 217A, 218, and 218A. One letter suggested excluding a road for ranching needs.

Many replies were received in response to the workbook. Some comments were opposed to wilderness classification because the area is impacted by mines and roads. Also, wilderness would not be in the best interest of the Nation. One comment was neutral on wilderness if private property would be removed from the study area. Some comments were in favor of wilderness designation.

Draft Plan Alternatives

The following range of public comments specific to WSA 217 was received in response to the Draft Desert Plan. One agreed with the Protection Alternative, another called for recommending the entire study area as suitable for wilderness under the Balanced Alternative, while a third insisted that the entire study area be recommended as suitable for wilderness under the Use Alternative. In addition, the material site in section 21, T. 2 N., R. 5 E., was requested to be deleted from wilderness.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Approximately 90 percent of the Bighorn Mountains WSA (217) is recommended as suitable for wilderness designation.

The Wilderness Study Area ranked very high in terms of relative resource values. This together with the fact that the area is one of the closest to the Los Angeles metropolitan area and is adjacent to the San Bernardino National Forest and is easily accessible were the primary considerations.

The study area contains the Rattlesnake Canyon grazing allotment. Although the WSA has known potential for mineral development and possible potential for geothermal energy production, it was considered that the highest and best use of the area would be as wilderness area.

The remaining portion, in the southeast and north, is recommended as Class L. This designation would protect those cultural resources that might fall outside of the adjusted borders.

IMPACT OF PROPOSED PLAN

Impacts resulting from range improvements and vehicle use on designated routes would not be easily absorbed, reducing the apparent natural condition. Improvements would result in fewer adverse impacts in more rugged areas where the developments are screened from immediate view.

WILDERNESS STUDY AREA 218

Morongo

GENERAL DESCRIPTION

The area (6,400 acres)[1] is bounded on the north by the graded Pipes Canyon Road and the paved Pioneertown Road, to the east by State Route 62, to the south by a U.S. Forest Service fire access road from lower Mission Creek Canyon to upper Whitewater Canyon, and to the west by the San Bernardino National Forest RARE II Area. Most of the area falls within a zone of checkerboard public/private land ownership. The WSA is entirely mountainous.

WILDERNESS QUALITY

Description of Environment

Various landform and vegetation types are represented in this area, which contains a portion of the eastern slope of the San Bernardino Mountains. Landforms range from low, rolling foothills to steep rugged mountains, while vegetation ranges from Mojave yucca, Joshua tree, creosote, and mixed shrubs, through pinyon-juniper woodland and on up into yellow pine forest. Several deep canyons cut into the eastern flank of the mountains; each contains water in the form of springs and small creeks. The sites of the springs are easily recognized by their stands of cottonwood trees.

Natural Condition

Areas affected by man have been deleted from the central area which meets wilderness criteria. These deleted areas include Kee Ranch, Pioneertown, Yucca Valley, Little Morongo Heights, Little Morongo Drive, Pierce Ranch, Sherman Road, Morongo Valley, Canyon House Ranch, T Cross K Ranch, Mission Creek Road, and all private land. The small central portion has been affected primarily by the forces of nature with the imprint of man's work substantially unnoticeable. This nine-section area contains no private land or permanent improvements. This area includes Section 36 (T. 1 N., R. 3 E.); Sections 31 and 32 (T. 1 N. R. 4 E.); Sections 3, 4, 5, 6, 8, the north and east three-quarters of Section 7, the north and west three-quarters of Section 9, the north half of 10, the northwest one-quarter of 18, the north half of 17, the northwest one-quarter of 16, and the southwest one-quarter of the southwest quarter of 2 (T. 1 S., R. 4 E.).

[1] Portions of T. 1 N., R. 4E.; and T.1 S., R. 4 E., SBM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Terrain and vegetative diversity provide outstanding opportunities for solitude by providing numerous areas of seclusion. This diversity also provides outstanding opportunities for a primitive and unconfined type of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 66 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. There are no known mineral occurrences within this WSA. On the east side of the Pipes Canyon Fault, which forms the eastern boundary of the WSA, an adit has been dug on a vein containing silver and copper minerals. This type of mineralization could continue into WSA 218. There are insufficient data to accurately determine the potential, but it is doubtful whether an economic deposit will be found within the WSA.

Vegetation

No unusual plant assemblages occur within WSA 218. The makeup of the vegetation within the WSA consists mostly of California juniper one-leaf pinyon woodland, creosote bush scrub, and blackbush scrub. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

The Area is an excellent desert to mountain ecotonal area and includes 3 square miles (5%) of the Little Morongo Canyon Special Habitat Area in the northern portion of the WSA.

Cultural Resources

The entire WSA falls within an area of predicted high cultural resources significance/sensitivity.

Native American Uses, Needs, and Sites

No Native American resources are currently reported for this WSA. Traditional residents were the Pass Cahuilla and Serrano. Resources are expected to occur in the eastern half of the WSA which is part of the Morongo Valley.

Scenic Quality

The study area consists of a very small portion of the Whitewater Scenic Quality Polygon, which received high scores in vegetation and uniqueness and high-medium scores for landform and color. The scenic quality rating for the study area is "high". The area serves as a natural, scenic backdrop to Morongo Valley and Highway 62.

General Recreation

Little Morongo Canyon is an unevaluated interpretive site which receives much hiking and camping activity. Deer and dove hunting is considered good in this WSA. Good floral display opportunities exist in the Morongo Valley. Portions of this area are designated as a Natural Environment Area.

Range Uses and Potential

There are no significant range resources in the area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Public comment is overwhelmingly in favor of the entire roadless area receiving wilderness status due to the ecological and geological diversity and the location adjacent to both RARE II and existing wilderness lands. Most recent comments urge land exchanges to solve the land ownership problem.

Study Phase

Twenty-eight letters were received on area 218. Twenty-five of the letters favored a wilderness designation. The area's adjacency to the San Gorgonio Wilderness Area and land exchange were the most common comments. The area's scenic quality was often expounded along with specific flora and fauna. Joshua tree forest, pinyons and junipers, bear, deer, bobcat, racoons, birds, legless lizards, tree frogs, red diamond back rattlesnakes, granite spiny lizards, and rock lizards were specific flora and fauna listed for protection. Natural springs provide a unique watershed habitat that many felt heightened the area's wilderness potential. Adjacency to the Pacific Coast was also seen as improving the area's wilderness qualities. Several times a boundary suggestion was made--to extend boundary eastward to allow inclusion of important transitional zones, including Chaparrosa Peak, and Old Serrano Indian Trail. One letter discussed the possible need to cut back the southmost boundary because of subdivided Morongo Valley land. Primitive recreation, archaeological, and dendroclimatic research were all opportunities listed for the area.

The letters opposing a wilderness designation often spoke of the large amount of non-public lands in the area. Roads and recreation opportunities were mentioned. One writer suggested that joining areas 218A and 339 would make an excellent winter riding area.

Workbook Comments

Some comments were received in response to the Public Input Guidelines for the Wilderness Study Phase (Workbood, 3/15/79). The comments were in support of wilderness designation, and they recommended the acquisition of private inholdings.

Draft Plan Alternatives

The following range of public comments specific to WSA 218 was received in response to the Draft Desert Plan. One agreed with the Protection Alternative, another agreed with the Balanced Alternative's recommendations, while a third insisted that a greater acreage be recommended as suitable for wilderness than in the Protection Alternative.

SUMMARY OF RATIONALE FOR PROPOSED PLAN

The Morongo Wilderness Study Area (218) is recommended as nonsuitable for wilderness designation.

With the exception of exploration along the periphery of the WSA, little is known of the area's mineral potential. The area supports deer and dove hunting, in addition to floral displays, all of which are rated good.

The Wilderness Study Area rated approximately midway in relative wilderness values and is located close to population centers. Because competing resource values were generally low, it was decided that the highest and best use of the land would be in a less restrictive multiple-use class.

The entire area was recommended for Class L designation. This will allow access for further mineral evaluation and general recreation while still protecting the natural and cultural resource values. This classification will also maintain the area's high scenic quality.

IMPACT OF PROPOSED PLAN

The area is recommended for designation as Class L. Activities permitted under the class guidelines would not significantly impact the wilderness values.

WILDERNESS STUDY AREA 218A

Whitewater

GENERAL DESCRIPTION

The area (13,000 acres)[1] is bounded on the south by Interstate 10, on the north by a U.S. Forest Service fire access road between lower Mission Creek and upper Whitewater Canyon, on the east by State Route 62, and on the west by the San Bernardino National Forest RARE II area. A road through lower Whitewater Canyon to a fish hatchery penetrates the area from the south. The area is predominately public land. Non-public lands, which account for approximately 35 percent of the entire area, occur mostly on the southern and eastern edges of the roadless area and in Whitewater Canyon as solid blocks. This WSA is 85 percent mountains, 10 percent riverwashes, and 5 percent dissected fans.

WILDERNESS QUALITY

Description of Environment

Various landforms and vegetation types are represented in this area, which contains a portion of the eastern slope of the San Bernardino Mountains. Landforms range from broad bajadas at the eastern edge of the area to steep, rugged mountains in the interior. Vegetation ranges from yucca, creosote, and mixed scrubs through pinyon-juniper and up into yellow pine forest. Several creeks flow through the area in steep-walled canyons and, at least in the upper elevations, many flow all year round. The Whitewater River and Mission Creek are examples of these year-round streams. In the Whitewater Canyon, highly eroded and colorful ridges protrude above the stark whiteness of the boulder-strewn canyon floor. Various locations throughout the area also offer excellent views of the rugged, near-vertical slopes of nearby San Jacinto Peak.

Natural Condition

This area, which appears dominated by natural forces, exhibits an overall undeveloped, primeval character. Because of terrain and vegetative variation, it is insulated from the effects of nearby man-made features, such as the homesteads and highways located at the southern and eastern edges of the area. The boundaries of the Wilderness Study Area have been adjusted to exclude non-public land and impacts of the homesteads and other developments. The resulting southern boundary skirts the southern edges of Sections 31 through 33, then follows the cliff-tops to a point north of the fish hatchery

[1] Portions of T. 2 S., R. 3 E., SBM.

in lower Whitewater Canyon, and then east through Sections 13 and 14 to the eastern edge of the roadless area. The eastern boundary follows the eastern edge of T. 2 S., R. 3 E., until it meets the Mission Creek Road on the north. Some non-public land inholdings and primitive roads do penetrate the area, as do a few old mining scars; however, man's influence remains substantially unnoticeable as a result of the topographical and vegetative screening.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Topographical and vegetative diversity provide outstanding opportunities for solitude and primitive and unconfined types of recreation through a screening effect. In addition, views to the adjacent RARE II area enhance opportunities to experience both solitude and spaciousness. The availability of water greatly enhances most primitive recreation opportunities. The routing of the Pacific Crest National Scenic Trail through this area provides further opportunities for primitive recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 10 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based soldly on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This Potential Geothermal Resource Area has possible potential for uranium, metals, and geothermal. No claims are recorded.

Vegetation

The most important aspect of the vegetation of this WSA is the Whitewater Canyon riparian assemblage (cottonwood-willow association). The vegetation of this area otherwise contains components of creosote bush scrub, mesquite thicket, and pinyon-juniper woodland (California juniper-one leaf pinyon), and some yellow pine forest. No sensitive plant species are known from this WSA; however, Monardella rosiboni has been found several kilometers northeast of the eastern boundary and may be present on the site.

Wildlife

Whitewater Canyon is a unique area where floral and faunal representatives of coastal, mountain, and desert ecosystems overlap. Several species occur together here and in relatively few, if any, other areas. It is extremely diverse and of scientific importance. In addition to the more general attributes, the Whitewater Canyon area supports two prairie falcon eyries (two breeding pairs) and 17 square miles of potential foraging area. It is also good habitat for mule deer; 17 square miles have been identified as mule deer concentration area. Summer tanagers breed in the riparian zone in the lower canyon and may breed above the fish hatchery.

Cultural Resources

Within the WSA, 2 square miles of high cultural resources sensitivity occur.

Native American Uses, Needs, and Sites

This WSA represents an area of traditional habitation by the Pass Cahuilla and Serrano. A traditional Cahuilla use area, village site, and graveyard are located in the extreme southeastern part of the WSA. Another Cahuilla village site and burial area lies in the extreme southwestern part of the WSA. A Morongo Cahuilla land-claim boundary line runs across the extreme southern tip of the WSA. Collection areas and hunting territories occur within this WSA.

Scenic Quality

The study area, which includes portions of two scenic quality polygons, has an overall scenic quality rating of "high." Most of the study area lies within the Whitewater polygon, which received high scores for vegetation and uniqueness and high-medium scores for landform and color. The unique scenic feature in the area is the presence of flowing water in the form of the Whitewater River.

General Recreation

One interpretive site as yet unevaluated is located in this WSA. Two teaching and research sites receive up to seven visits annually from pre-college, college, or university classes. Deer, quail, and chukar hunting opportunities are excellent in parts of this WSA. Parts of this WSA are designated as a Primitive Area and Natural Environment Area.

Range Uses and Potential

This WSA is in the Whitewater Allotment. The WSA also is within the Morongo Herd Management area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Most of the comments received on this area favor its inclusion as a Wilderness Study Area based upon ecological and geological diversity, as well as its location adjacent to a RARE II area and near the existing San Gorgonio Wilderness. One comment received dealt with potential conflict with a proposed flood-control drain site, which would be located within the Wilderness Study Area. This proposal is a study, not an inventory, factor.

Study Phase

Twenty-three comments were received on WSA 218A. Sixteen letters favored a wilderness designation. Scenic and air quality and contiguity to RARE II lands and the Pacific Crest Trail were common reasons listed for wilderness designation. The area's variety of flora and fauna, bighorn sheep, burros, high density of snakes, and transitional character were noted. Geologic and scientific opportunities were also discussed.

The letters opposing wilderness designation for the area were most concerned that a wilderness designation would affect the proposed Whitewater River damsite. Motorized vehicle interest was discussed in one letter, and a transmission line was noted by one commenter as detracting from the area's wilderness potential.

Many comments were received in response to the workbook. Most of the comments favored wilderness designation; some requested the acquisition of private lands. One comment also requested that the boundaries be adjusted to remove private lands from the Wilderness Study Area.

Draft Plan Alternatives

The following range of public comments specific to WSA 218A was received in response to the Draft Desert Plan Alternatives. One was in complete agreement with the Protection Alternative, while another called for greater acreage to be recommended as suitable for wilderness than in the Protection Alternative. In addition, it was stated that lands needed for the Whitewater dam should be recommended as nonsuitable for wilderness.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Whitewater Wilderness Study Area (218A) is recommended as suitable for wilderness designation.

The area's quality as a wilderness resource is reflected in its high ranking (10) in terms of relative wilderness values. The study area shares a border with a U.S. Forest Service proposed wilderness. Although comflicts existed between the mineral and wilderness values, they were considered to be low. Considering these, plus the other resource values that had been identified, it was decided that wilderness was the highest and best use of the area.

IMPACT OF PROPOSED PLAN

The entire study area is recommended for wilderness designation, and all wilderness values would be protected.

WILDERNESS STUDY AREA 219

Saddle Peak Mountains

GENERAL DESCRIPTION

The northern boundary of this area (9,250 acres)[1] parallels a mining access and radio tower road. The eastern boundary is State Route 127. The southern boundary is a mining access road. And the western boundary is Death Valley National Monument. The area consists primarily of public lands with 1 square mile of non-public land near the center. There are a number of recorded mining claims located throughout the study area. This WSA contains 70 percent mountains, 10 percent alluvial fans, 10 percent sand covered dissected fans, and 10 percent sand covered fans. Most soils in this WSA are highly sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

This area includes mountains, sand hills, and creosote-covered bajadas.

Natural Condition

This area generally appears to have been affected primarily by natural forces. Some active mining claims and mines are found in both the northern and southern portions and are substantially noticeable in the immediate area; however, the administratively endorsed wilderness area in Death Valley National Monument is adjacent. Therefore, the area has been included for further consideration.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Opportunities for solitude or a primitive and confined type of recreation are limited by the area's restrictive size. Active mine operations 1 mile west of the Death Valley National Monument boundary tend to have a confining effect on freedom of movement. However, the roadless area has been retained because of the adjacent administratively endorsed wilderness area in the National Monument.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 131 out of 137 WSAs.

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[1]Portions of T. 18 N., R. 6 E.; and T. 19 N., R. 6 E., SBM.

RESOURCES CONSIDERED

Geology-Energy-Minerals

This WSA contains two former talc producers. The geologic environment is very similar to the area around the Paddy's Pride lead-silver mine. Potential for copper, lead, silver, and talc, all strategic minerals, is very high. The area is also prospectively valuable for geothermal energy (within a Potential Geothermal Resource Area). There are approximately 12 claims here.

The area around the talc mines is very disturbed. Mining has exposed fresh surfaces of white, talcose rock which contrast with the darker color of undisturbed material. The disturbed area can be seen in BLM's air photo 12, flight line 92, and California Division of Mines and Geology, Special Report 95.

Vegetation

No unusual plant assemblages occur within WSA 219. Vegetation within the WSA consists mostly of creosote bush and allscale scrubs. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

This area is located immediately east of the southeast corner of Death Valley National Monument. The area includes the Saddle Peak Hills forming the western half of the WSA and the northwestern portion of the Silurian Valley. Elevations range from approximately 500 feet on the valley floor to 2,500 feet at the western border. Vegetative composition is uniform and dominated by creosote bush. The area is not known to support any listed, sensitive, or rare species. The sandy substrate does provide approximately 3 square miles of habitat for the Mojave fringe-toed lizard, a highly adapted sand-dwelling species of spotty distribution in the central and eastern Mojave Desert. Future wildlife inventories may verify the presence of other unique or sensitive species in this area.

Cultural Resources

No known prehistoric resources occur in this WSA. An occasional historic mining feature can be expected.

Native American Uses, Needs, and Sites

No Native American resources are currently reported for this wilderness area. This area represents traditional territory of the Panamint Shoshone. Potentially sensitive resources can be predicted for the area just east of Saddle Peak Hills.

Scenic Quality

The scenic quality rating for this study area is "medium." It received medium scores for landform, color, and uniqueness and a low score for vegetation.

General Recreation

No known recreation resources exist in this WSA.

Range Uses and Potential

There are no known range resources in this area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Most comments received supported inclusion of the area.

Study Phase

Six letters were received on WSA 219. Four favored wilderness designation, stating that contiguity to Death Valley National Monument enhances management of wilderness. Primitive recreation opportunities, hiking, and photography, were noted, and the area's scenic quality was also mentioned.

The two letters opposing wilderness designation were concerned over mines, their access, and geothermal potential in the area.

Some comments were received in response to the workbook. Comments pointed out a portion of the area containing geological interest. It was also stated that this would be a good adjunct to the Death Valley National Monument wilderness proposal.

Draft Plan Alternatives

The following range of public comments specific to WSA 219 was received in response to the Draft Desert Plan. One agreed with the Use Alternative, while another called for both sides of State Route 127 being recommended as suitable for wilderness under the Protection Alternative. In addition, one stated that the exploration and development of minerals, oil, gas, and geothermal resources under the No Action Alternative were the best uses for the study area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Saddle Peak Mountains Wilderness Study Area (219) is recommended as nonsuitable for wilderness designation.

The area ranked very low in relation to the other Wilderness Study Areas. It has a history of mineral production and a very high potential for copper,

lead, silver, and talc and has also been identified as prospectively valuable for geothermal energy production.

Although the WSA did meet one of the desert-wide wilderness objectives, being adjacent to an administratively endorsed wilderness area, it was determined that the value of its mineral deposits (known and potential) was of greater significance than its value as wilderness.

The entire WSA is recommended for designation as Class M. This would permit access for mineral exploration and development and allow more intense motorized recreation use. A degree of protection would be afforded any natural or cultural resources that may be identified in the future.

IMPACT OF PROPOSED PLAN

The area is recommended for Class M. Activities permitted under the guidelines would result in impacts which would significantly affect the wilderness and scenic values. This classification is not compatible with the adjoining U.S. Forest Service proposed wilderness area.

WILDERNESS STUDY AREA 220

South Saddle Peak Mountains

GENERAL DESCRIPTION

This area (5,960 acres)[1] is bordered on the north by a mining access road, on the east by State Route 127, on the south by the Saratoga Springs Road, and on the west by the administratively endorsed wilderness in Death Valley National Monument. This small area consists primarily of public land with 1 square mile of non-public land located in the southern area. There are recorded mining claims in the extreme northwestern corner of the study area. This WSA contains 80 percent sand-covered plains, 10 percent hills, 5 percent mountains, and 5 percent sand-covered fans. Most soils in this WSA are moderately sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

This small area is almost entirely level and covered predominantly with creosote vegetation.

Natural Condition

This area generally appears to have been affected primarily by natural forces. A patented mining claim in the far northwestern corner has been excluded.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Opportunities for solitude or a primitive and unconfined type of recreation are limited by the restrictive size of this immediate area. There are active mine operations 1 mile west of the Death Valley National Monument.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 110 out of 137 WSAs.

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[1]Portions of T. 18 N., R. 6 E., SBM.

RESOURCES CONSIDERED

Geology-Energy-Minerals

The area is prospectively valuable for sodium and geothermal energy, and there is a very good potential for talc. There are about three claims within the WSA.

Vegetation

No unusual plant assemblages occur within WSA 220. Vegetation within the WSA consists mostly of creosote bush scrub and allscale scrub. No rare plant species are known to occur within this WSA.

Wildlife

This Wilderness Study Area is located approximately 10 miles east of the Dumont Sand Dunes and south of the Saddle Peak Hills. The topography is almost level; the ground rises from 300 to 450 feet elevation. The surface is sandy with scattered vegetation dominated by creosote bush. There are no known listed or sensitive species present in this WSA. The Mojave fringe-toed lizard, a sand-dwelling species of scattered occurrence over the central and eastern Mojave Desert, is present over the entire area. Future wildlife inventories of this site may verify the presence of other species of limited distribution.

Cultural Resources

No areas of cultural resources sensitivity/significance are known in this proposed WSA. The area, however, has not been surveyed. Many sites can be predicted to occur in the region based on its proximity to the Amargosa River.

Native American Uses, Needs, and Sites

No Native American resources are currently reported for this wilderness area. This area represents traditional territory of the Panamint Shoshone. Potentially sensitive resources can be predicted for the area just east of the Saddle Peak Hills.

Scenic Quality

This area has a scenic quality rating of "medium." It consists of a small portion of a very large scenic quality polygon that received low scores for landform and color and medium scores for vegetation and uniqueness. Scenic views of the nearby Dumont Dunes and Avawatz Mountains enhance the visual quality of the area.

General Recreation

No known recreation resources exist in this WSA.

Range Uses and Potential

No resources exist in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

The few comments received referred to mineral potential in the area and challenged the evaluation of areas less than 5,000 acres in size. Others supported further wilderness consideration because of the adjacency of administratively endorsed wilderness areas.

Study Phase

Four letters were received on WSA 220. Three opposed wilderness because of mining and geothermal potential. The one letter favoring wilderness designation discussed its contiguity to the Death Valley National Monument.

One comment in support of wilderness designation was received in response to the workbook.

Draft Plan Alternatives

The following range of public comments specific to WSA 220 was received in response to the Draft Desert Plan. One agreed with the Use Alternative, while another called for both sides of State Route 127 also being recommended as suitable for wilderness under the Protection Alternative. In addition, one stated that the exploration and development of minerals, oil, gas, and geothermal resources under the No Action Alternative were the best uses for the study area.

SUMMARY OF RATIONAL FOR THE PROPOSED PLAN

The South Saddle Peak Mountains Wilderness Study Area, 220, is recommended as nonsuitable for wilderness designation.

The area ranked 110 in relative wilderness values. The area is prospectively valuable for mineral development and geothermal energy production. Although it is adjacent to an administratively endorsed wilderness in Death Valley National Monument, one criterion specified in the desert-wide wilderness objectives, it was decided that the area's value for mineral development and vehicular recreation were more significant than its wilderness value.

The area is recommended for Class M designation to provide for mining and recreational use. This classification would provide a degree of protection for any existing natural or cultural resources.

IMPACT OF PROPOSED PLAN

The Class M designation coupled with a high potential for development of talc reserves will result in severe adverse effects to the natural condition of the area. The Class M guidelines are not compatible with wilderness values.

WILDERNESS STUDY AREA 221

Avawatz Mountains

GENERAL DESCRIPTION

This area (96,600 acres)[1] is bordered on the north by Death Valley National Monument and a graded road from the Monument east to State Route 127 at Salt Creek; on the east by Highway 127; on the south by Silver Lake Road and a portion of a utility corridor; and on the west by the Fort Irwin Military Reservation and an improved road through Avawatz Pass used by the military. The area includes approximately 12 sections of non-public land which are distributed throughout the area and account for approximately 10 percent of the total land area. There are several recorded mining claims located throughout the study area. This WSA contains 37 percent mountains, 20 percent alluvial fans, 20 percent dissected fans, 15 percent highly dissected fans, 2 percent playas, 2 percent badlands, 2 percent hills, 1 percent pediments, and 1 percent riverwashes. Most soils in this WSA are highly sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

The area consists of the large mountain mass of the Avawatz Mountains which contain many colorful eroded slopes, rugged ridges, and steep-walled, narrow canyons. These mountains are surrounded by a steeply descending creosote-covered bajada which transforms into a dry lake near Highway 127. White talc deposits dot the landscape at intervals, and the northern portion provides outstanding views into Death Valley National Monument.

Natural Condition

The majority of the area retains its primeval character and influence and appears to be affected primarily by natural forces with man's work substantially unnoticeable. Areas where man's work is substantially noticeable were excluded: (1) the Sheep Creek Springs area in the north, because of extensive open-pit talc mining operations, a house, four small cement foundations, an outhouse, and associated roads and ways; (2) the extreme southwest corner, where extensive open-pit mine operations degrade and reduce the natural appearance of the landscape through bulldozer scrappings, tailings, and associated roads; (3) a circular quarter-mile track of pavement, adjacent to Highway 127 in Section 19, (T. 16 N., R. 8 E.); (4) the graded south Mormon Springs Road and the area around the Chinaman

[1]Portions of T. 15 N., Rs. 6, 7 and 8 E.; T. 16 N., Rs. 6, 7 and 8 E.; T. 17 N., Rs. 5, 6, 7 and 8 E.; and T. 18 N., Rs. 5, 6, 7 and 8 E., SBM.

mine in Sections 1 and 2 (T. 16 N., R. 6 E.), because of bulldozing and mining scars; (5) a graded road, 1 mile east of, and paralleling, the Sheep Creek Spring Road into the Avawatz Mountains, and associated mining operations; and (6) in the extreme southeast corner, a CALTRANS paved pull-out in Section 16, (T. 15 N., R. 8 E.) and mining activity (scrapes and road cuts) in the low hills there. The area west of Avawatz Pass Road contains evidence of mining activities scattered throughout. Several primitive ways penetrate the area but are insignificant because of their vegetative regrowth and repeated washouts. Another way extends up to the Old Mormon Springs from Highway 127. This way is substantially unnoticeable from most of the area.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Outstanding opportunities for solitude or a primitive and unconfined type of recreation are available. Spaciousness on the mountain peaks and large bajadas, combined with vistas into Death Valley National Monument, complement the numerous opportunities for solitude found in the narrow canyons and rugged mountain ridges which screen visitors from one another. The area also provides for unconfined movement and a primitive and unconfined type of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 31 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has known potential for halite, gypsum, strontium, talc, and limestone in the northern portion, and possible potential for iron, gold, copper, silver, and other metals throughout. There is potential for geothermal energy, sodium, and oil and gas in the northern portion. There are approximately 135 claims.

Vegetation

No unusual plant assemblages occur within WSA 221. Vegetation within the WSA consists mostly of creosote bush scrub and allscale scrub. No rare plant species are known to occur within this WSA.

Wildlife

This WSA contains 75 square miles of seasonal bighorn sheep range. The Avatwatz Mountain bighorn sheep herd is estimated to include 35 individuals. Nine springs in the Avawatz Mountains provide good sources of water. An extremely dense stand of Joshua tree woodland habitat adjacent to the mountains is also present in WSA 221.

Cultural Resources

A number of areas of cultural resource sensitivity/significance are located throughout the proposed WSA.

Native American Uses, Needs, and Sites

The WSA represents an area of Shoshone materials collection. Ballena grass was collected in the extreme northwest section, while tule was collected in the northeast part.

Scenic Quality

The study area, which encompasses portions of two scenic quality polygons, has an overall scenic quality rating of "medium.". It is dominated by the massive and steep Avawatz Mountains, which received medium scores for landform, color, and uniqueness and a low score for vegetation. The height and steepness of these mountains are fairly unique in the region. The lower bajadas and valley floor received low scores in landform and color and medium scores in vegetation and uniqueness. The study area serves as a majestic, scenic backdrop to views from State Route 127.

General Recreation

There are two interpretive sites in the WSA. The Avawatz Mountains as a whole were the only site evaluated, rating a medium for interpretive value. The Avawatz Mountains fans are yet unevaluated.

One teaching and research site, receiving one visit annually from a university class, is located within this WSA.

There is good hunting opportunity for quail in about 30 percent of the WSA.

There is one concentrated use zone in the WSA along the edge of the eastern boundary. This concentrated use zone received 8,834 annual visitor use days in 1978, of which a small portion occurred in the WSA.

The uses in the concentrated use zone consisted of motorized vehicle free play and touring and nature-oriented activities.

Range Uses and Potential

No range resources exist in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Those comments relative to the inventory dealt with the improper omission of roads to active mines within the Avawatz Mountains and with the area's wilderness qualities. After further field checks, changes were made where appropriate.

Study Phase

Thirty-six letters were received on WSA 221. Twenty-one letters opposed wilderness designation for this area. Sights and sounds were often listed as detracting from the area's wilderness potential. A transmission line, the railroad, low-flying aircraft, Fort Irwin bombing practice, roads, mineral activities, motorized vehicle noise, and tracts were mentioned. Mineral (iron) and geothermal potential were common concerns. One letter said the area was too flat to be wilderness, another discussed the hazards of mine shafts to unwary recreationists, and another the lack of water. Access for a coal slurry transport system and recreation were discussed. Camping and rockhounding were desired, but protection of petroglyphs was recommended. One boundary alteration was suggested, to draw the wilderness boundary 2 miles from claim boundaries.

The letters favoring wilderness designation often mentioned scenic quality and contiguity to Death Valley National Monument as heightening the area's wilderness potential. Protection of ecosystems from bajada to playa was urged. Scientific, educational, and recreation opportunities (camping and hiking) of the area were listed.

Some comments were received in response to the workbook. Some comments requested adjusting the study area boundaries to provide a buffer zone around access routes and mining claims. One commenter wanted the study area open to vehicle access except for motorized vehicle "racers".

Draft Plan Alternatives

The following range of public comments specific to WSA 221 was received in response to the Draft Desert Plan. One was in agreement with the recommendations of the Protection Alternative. Another called for the recommendation of the entire study area and/or more nonmountainous terrain being suitable for wilderness. In addition, one stated that the exploration and development of minerals, oil, gas, and geothermal resources under the No Action Alternative were the best uses for the study area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Avawatz Mountains Wilderness Study Area (221) is recommended as nonsuitable for wilderness designation.

Although the area was ranked relatively high (31), after consideration of the desert-wide wilderness objectives it was decided that the area's potential for mineral development and general recreation was of greater significance than its wilderness value.

The rugged mountain areas have been designated as Class L. This designation will protect the 75 square miles of seasonal bighorn sheep range and the numerous springs, in addition to the areas of high cultural sensitivity. Mineral exploration and development in the rugged mountain areas could continue with limitations.

The M classification along the bajada provides an area for motorized vehicle play and touring with limited restrictions. Other recreation activities, such as hunting and rockhounding, would be enhanced and multiple use of the resources encouraged by this action.

IMPACT OF PROPOSED PLAN

The Class L designated lands which include the mountainous western half of the WSA should be able to absorb development allowed by the class guidelines with minimal impact to wilderness values. The Class M designated lands include the large bajada in the eastern half of the WSA. In this region, impacts would be highly visible over a large distance and severely degrade wilderness characteristics.

WILDERNESS STUDY AREA 221A

South Avawatz Mountains

GENERAL DESCRIPTION

This triangular area[1] has as its northern boundary Silver Lake Road. The southern boundary of the Wilderness Study Area is the northern edge of the utility right of way which contains power transmission lines. This boundary is located along a line 400 feet north of three existing transmission lines (except where a service road may extend outside the right of way). The western boundary is the Camp Irwin Military Reservation. This WSA contains 25 percent hills, 25 percent plains fans, 20 percent mountains, 10 percent dissected fans, 10 percent highly dissected fans, 5 percent alluvial fans, 3 percent pediments, and 2 percent riverwashes.

WILDERNESS QUALITY

Description of Environment

The boundaries encompass a large bajada of coarse gravel and scattered boulders crisscrossed throughout by many graveled washes. This large bajada slopes generally east from 1,400 feet near the southern Avawatz Mountains to less than 900 feet at the eastern limit of the area. The southern end of the Avawatz Mountains occupy the western end of the area rising abruptly to a maximum elevation of 3,262 feet. The creosote bush scrub is the dominant plant community throughout.

Natural Condition

The area is largely untrammeled by man. An area of light mining operations has been excluded at the northwest corner and along the extreme southwest edge. A road used for access to a transmission tower also has been excluded in Sections 12 and 13 (T. 14 N., R. 6 E) and Sections 18 and 19 (T. 15 N., R. 7 E). The narrow strip between Fort Irwin and the utility corridor was excluded because the width was less than one-half mile. With these exceptions, the imprint of man is substantially unnoticeable or entirely absent within the boundaries. The entire remaining area retains its primeval character and influence.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Outstanding opportunities for solitude are found within the roadless area. The canyons and washes within the southern Avawatz Mountains provide

[1]Portions of T. 14 N., Rs. 6, and 7 E.; and T. 15 N., Rs. 6, 7 and 8 E., SBM.

topographic screening and separation into enclosed spaces. Outside of the mountains, large areas are visible from the bajada, including the Soda Mountains and the Avawatz Mountains. The unbroken view of these large features provides a psychological feeling of vastness and outstanding opportunities for solitude. The diversity of terrain within the area provides outstanding opportunities for a variety of forms of primitive recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 54 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey.

This WSA has possible potential for iron and other metals. No claims are recorded. The Iron Mountain mine, located immediately adjacent to the WSA, is currently in production.

Vegetation

No unusual plant assemblages occur within WSA 221A. Vegetation within the WSA consists mostly of creosote bush scrub and allscale scrub. No rare plant species are known to occur within this WSA.

Wildlife

About 3 square miles of this area are seasonal range for bighorn sheep.

Cultural Resource

Approximately 1 square mile of high sensitivity/significance is located in the proposed WSA.

Native American Uses, Needs, and Sites

No Native American resources are reported for this WSA other than a Chemehuevi collection zone which overlaps the extreme southwest tip. Other groups that consider this an area of traditional significance are the Mohave and Panamint Shoshone.

Scenic Quality

This study area, which is composed of portions of two scenic quality polygons, has an over-all scenic quality rating of "medium." The mountainous portion received medium scores in landform, color, and uniqueness and a low score in vegetation. The valley portion received low scores in landform and color and medium scores in vegetation and uniqueness.

General Recreation

No known recreation resources exist in this WSA.

Range Uses and Potential

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENT

Inventory Phase

Most comments supported the findings.

Study Phase

Three letters were received on WSA 221A. Two favored wilderness designation because human activities are concealed by the terrain. The letter opposing wilderness indicated concern that wilderness designation would limit further development of mining activities. It also discussed the sights and sounds of mining activities as detracting from the area's wilderness potential.

Some comments were received in response to the workbook. One comment was in support of wilderness designation; another comment requested a half-mile buffer around mines and access roads. A third comment wanted motorized vehicle use restricted in the area.

Draft Plan Alternatives

The following range of public comments specific to WSA 221A was received in response to the Draft Desert Plan. One agreed with the Protection Alternative recommendation, another asked for the entire study area to be recommended as suitable for wilderness under the Balanced Alternative, while a third called for more nonmountainous wilderness under the Balanced Alternative. In addition, another insisted that the study area be classified as M or I because mining is the best use for the study area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The south Avawatz Mountains WSA, 221A, is recommended as nonsuitable for wilderness designation.

The WSA border excludes any active mines, but the site is adjacent to one currently in production. This WSA ranked 54 in relation to other WSAs studied, but it did not possess any desert-wide wilderness objective criteria. Limited natural and cultural resources are found in the area.

It was determined that the highest and best use of the area would be in other than wilderness designation. It is recommended that the western 40 percent be designated as Class L to protect the bighorn sheep seasonal range in the mountainous area. The remaining 60 percent which is made up of the lower slopes and fan are recommended for Class M designation. This would allow mineral exploration and development, recreation access, and a utility corridor.

IMPACT OF PROPOSED PLAN

The Class L recommended lands which include the mountainous western half of the WSA should be able to absorb development allowed by the class guidelines with minimal impact to wilderness values. The Class M designated lands include the large bajada in the eastern half of the WSA. In this area impacts would be highly visible over a large distance and severely degrade wilderness characteristics.

WILDERNESS STUDY AREA 222

Kingston Range

GENERAL DESCRIPTION

This extremely large area (270,360 acres)[1] is located about 15 miles north and east of the town of Baker. The western boundary is a combination of State Route 127; a dirt road just east of Renoville, running southeast to connect with a dirt road running southwest across Silurian Dry Lake to State Route 127; and the triangular-shaped roads joining at the Riggs site. The southern boundary of the wilderness study area is the northern edge of the utility right of way which contains power transmission lines. This boundary is located along a line 400 feet north of the three existing transmission lines (except where a service road may extend outside the right of way). The northern boundary is the combination of the Excelsior Mine Road, which passes through Tecopa Pass and the town of Tecopa; the graded road from Mine Camp, southwest of Tecopa and running 2.5 miles southwest to 2,465 feet elevation; and the graded dirt road from 2,465 feet elevation running 1 mile north to 2,284 feet elevation at the Excelsior Mine Road. The eastern boundary is a combination of the Excelsior Mine Road, and a water line, and tank maintenance road in Kingston Wash.

This area consists primarily of public land with approximately 6 percent in scattered blocks of non-public land. The western portion, chiefly that on both sides of Amargosa Canyon and including parts of Dumont Sand Dunes, was withdrawn from general public entry by three protective withdrawals. (Public Land Orders 5224, 5337, and 5537). In addition, there are a number of recorded mining claims scattered throughout the study area.

This area contains 15 percent badlands, 15 percent sand-covered alluvial fans, 10 percent mountains, 10 percent hills, 10 percent alluvial fans, 10 percent sand-covered plains, 10 percent plains, 10 percent dissected fans, 5 percent highly dissected fans, 2 percent sand-covered hills, 1 percent sand dunes, 1 percent sand-covered dissected fans, and 1 percent sand-covered highly dissected fans.

WILDERNESS QUALITY

Description of Environment

This area has an extremely diverse terrain, including the steep Kingston Mountains, the Shadow Mountains, the Dumont Hills, the Silurian Hills, the

[1]Portions of T. 16 N., Rs. 9 and 10 E.,; T. 17 N. , Rs. 7, 8, 9, 10, 11 and 12 E.,; T. 18 N., Rs. 7, 8, 9, 10, 11, and 12 E., T. 19 N., Rs. 7, 8, 8 1/2, 9, 10, and 11 E.; T. 19 1/2 N., R. 7 E.; and T. 20 N., Rs., 7, 8, and 9 E., SBM.

Valjean Valley, the Dumont Dunes, and the western top of the Ibex Mountains. The rugged Kingston Mountains are the highest mountains in the area and display the largest variety of colors. A bajada slopes south from the Kingston Mountain Range and leads to the Kingston Wash. The Shadow Mountains have smooth ridges and rounded peaks with gentle interior canyons and numerous erosion channels. The Dumont Hills have a soft rolling topography, with numerous small interior valleys, located west of the Kingston Mountains. The Silurian Hills also have a soft rolling topography. Between the Kingston Range and the Silurian Hills is a very large interior valley called Valjean Valley, which is virtually flat. Located along Highway 127 are the Dumont Dunes, a relatively large sand dune system rising some 600-800 feet from the valley floor. Just north of the Dunes is the Amargosa River, which has surface running water most of the year. North of the river is the western tip of the Ibex Mountains. This zone has flat-topped mountains laced with numerous rocky, steep-walled canyons developed from continual erosion in volcanic rock. The vegetation of this area is as diverse as the landforms and changes primarily with elevation. In the washes, in the interior valleys, and at the base of the mountains, are a variety of low desert shrubs with creosote as the dominant plant. In the higher interior valleys there are Joshua trees, yucca, barrel cactus, and cholla. Above the high interior valleys, on the steep mountain sides, there is a pinyon pine-juniper forest which leads to a white fir forest at the highest elevations in the Kingston Mountains.

Natural Condition

The WSA contains areas both disturbed and undisturbed by man. The following areas along the perimeter have been excluded from further wilderness consideration because they do not meet criteria established by the Wilderness Act: (1) the southwestern side of the Silurian Hills, because of extensive silver and talc mining operations and associated scard, roads, and way, including the Rigg, Talc, Silver Lake and S.S. mines; (2) an improved way from Highway 127, at Renoville, to the Eastern Star mine, Kingston Spring, and a patented mine at Section 30 (T. 18 N., R. 10 E); (3) the Dumont Dunes, a BLM-designated "free-play area," where extensive motorized vehicular use is evident in the area in the form of vehicle tracks, ways, and an absence of vegetation; (4) portions of the Spring Hills and the bajada north and and west of them, because of motorized-vehicle scars, ways, mining scars, the Dumont Dunes entrance road, and a ranch house complex and road in Section 36, (T. 18 N., R. 6 E); (5) paved highway maintenance circle approximately 1 mile south of the Ibex Spring Road, east of Highway 127; (6) an area just south of Ibex Pass, for the old paved route of Highway 127 and a wood pole utility line and associated road; (7) the extreme northwest corner of the area in the vicinity of McLain Park, for mining operations and scars; (8) the areas south of the Excelsior Mine Road from Tecopa to approximately 5 miles southeast of Horse Thief Springs, for the town of Tecopa, the China Ranch and road, patented mining in Sections 33, 34, 36, 26, and 27 (T. 20 N., R. 7 E), the town of Mine Camp southeast of Tecopa Pass, a waterline road, a house and associated facilities at Horse Thief Springs, a water tank, a corral, fire break, extensive mining operations and associated roads, ways, buildings, tunnels, pits, scars, and locations of the patented Western Talc, Smith,

ACME, and Omega mines, and other patented mines in Sections 33-35 (T. 20 N., R. 8 E) and Sections 3, 4 12, and 13 (T. 19 N., R. 8 E); (9) the road leading west off the Excelsior Mine Road to the Horse Thief Mine and its associated talc mine operations; (10) an improved fenceline road heading west off the Excelsior Mine Road to the southern edge of the Kingston Range; (11) the abandoned Shadow Mountain mine, because of extensive bulldozing scars, mine shafts, slag piles, and associated structures; and (12) a road running north off the southern boundary into the Shadow Mountains, for its associated mines and roads.

The remaining area has been affected primarily by natural forces, with man's imprints substantially unnoticeable. There are a few primitive ways south of the Kingston Mountains in the bajada, none of which detract from the naturalness of the area. The old Tonapah-Tidewater Railroad bed runs in a north-south direction through this area and is of historical significance. The Sperry Wash Road also runs through the northern portion of the area. It is unmaintained from the northern edge of the Dumont Dunes area to the Western Talc mine. Within this area it runs through a wash and has an insignificant effect upon the naturalness of the area.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Because of the extreme diversity in both terrain and plant type, those portions of the area which meet wilderness criteria have outstanding opportunities for solitude. The area has substantial topographical and vegetational screening and is of such a great size as to be able to keep visitors apart. In addition to solitude, outstanding opportunities for a primitive and unconfined type of recreation are also available because of the diversified vegetation and terrain.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 6 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

This large WSA includes known occurrences of silver, lead, copper, and talc, all strategic commodities, plus gold, gypsum, zeolites, bentonite, and salable materials. There is good potential for more discoveries of these commodities within WSA 222 in the near future. The area also has potential for leasable mineral resources such as oil, gas, sodium, and geothermal energy. Sinuous WSA boundaries exclude some areas which have been disturbed by mining activity, but often curve around the disturbed areas and do not take into account expansion of mining operations or continuation of the mineral deposits.

The following site-specific discussion of geology, energy, and mineral resources is generally organized from the northwestern part to the southeastern part of the WSA.

Between McLain Park and Tecopa there is excellent potential for zeolites and bentonite. A major company is drilling part of the zeolite deposit north of the WSA to test the economic potential. This deposit is known to extend into WSA 222. Zeolites are used for environmental protection, in sewage treatment, and as filters. Bentonite, which is used as a drilling mud and in pollution control, is being mined in McLain Park, outside the WSA boundaries. This deposit is also likely to extend into the WSA.

The Sperry Hills contain gypsum and talc. Although the former gypsum producer near China Ranch has been excluded, the deposit probably continues into the WSA. There are two talc deposits in this area: the Amargosa Mine, a past producer, and the Tough prospect. Most of the Amargosa deposit, southwest of China Ranch, has been excluded, but future exploration and development could extend into the WSA. The Tough deposit is probably small and not of economic importance.

Pre-Cambrian metasedimentary rocks in the western Alexander Hills have very high potential for silver-lead mineralization. These rocks produced large quantities of silver-lead ore north of Tecopa Pass and in the southern Alexander Hills. This geologic environment is found within the WSA in Sections 29 and 32, T. 20 N., R. 7 E.

The parts of WSA 222 in the Valjean Hills-Rabbit Holes Spring Area and in the Kingston Range have not been field verified nor has a detailed analysis been made of the mineral potential. The late Pre-Cambrian rocks in the Valjean Hills and south of Rabbit Holes Spring are known to host talc, lead, silver, and zinc in the nearby Kingston and Nopah Ranges. The faulted limestone in the Valjean Hills has potential for lead-silver mineralization or it could be used in the chemical or construction industries. Several uranium and thorium anomalies were detected by an airborne gamma-ray survey east of the Valjean Hills and north of Kingston Wash. Four uranium anomalies along a lineament seen on LANDSAT imagery also indicate potential for mineralization. A tonal anomaly near Porcupine Tank coincides with an alteration zone containing stockwork iron sulfides, which form a favorable geologic environment for copper or gold mineralization. The main block of the Kingston Range is composed of quartz monzonite. Further south at Turquoise Mountain this intrusion contains copper, molybdenum, gold, and turquoise. There is high potential for these commodities here in the Kingston Range, too, based on the tonal anomaly - stockwork and high molybdenum values from some geochemical samples. The sedimentary rocks on the borders of the quartz monzonite intrusion host many mineral deposits. The Iron Cap Mine, a copper prospect in Section 34, T. 19 N., R. 10 E., is included in the WSA. The Johnson Talc mine in Sections 25 and 26, T. 19 N., R 10 E, is excluded by a "cherry stem" but the deposit probably extends into the WSA. In the northern Silurian Hills the WSA excludes the known deposits of silver and lead, but the boundary hugs the mountains, which would make access difficult. Field

checking would be necessary to determine whether the mineralized units continue into the WSA.

A former lead-silver producer and a gypsum deposit are included in the Shadow Mountains section of this WSA. The road to the Eastern Star lead-silver mine and part of an adit appear to be a "cherry stem" exclusion, but the remainder of the deposit and workings are included. All Pre-Cambrian rocks in the Shadow Mountains have potential for lead, silver, copper, and gold, and may host talc, too.

The Red Canyon gypsum deposit outcrops in Section 17, T. 17 N., R 10 E., north of the Eastern Star mine. The same Tertiary sediments contain gypsum here and at China Ranch. The sediments extend north and south of Red Canyon and probably contain gypsum throughout their distribution. These sediments also have potential for uranium mineralization.

To the west, on Shadow Mountain, most of the gold, copper, lead, and silver producers have been excluded. The rocks which host these ores have high potential for metallic mineralization on all of Shadow Mountain. As in the Silurian Hills, field checking would be necessary to determine if rocks having high mineral potential are included.

Most of WSA 222 has been classified by the U.S.G.S. as prospectively valuable for oil, gas, sodium, and geothermal energy.

Salable materials, such as sand and gravel, are also found here. Development of these resources is only likely to occur along roads.

There are over 25 claims within this WSA. The study area is already protected in part by a withdrawal from mineral entry.

Vegetation

This area is vegetationally one of the 30 outstanding areas within the CDCA. Five unusual plant assemblages occur within the WSA. Riparian areas occur in the Amargosa Gorge and near Horsethief Springs. The second is a stand of enormous Nolina plants, Nolina wolfii, some of them as much as 5 meters high and over 3 meters in girth. They are found only here and in Joshua Tree National Monument. The third unusual plant assemblage is another calciphyte assemblage of rare limestone endemics, and the fourth is a small enclave of white fir, Abis concolor, consisting of about 150 trees in a small protected, north-facing canyon near Kingston Peak. The fifth is a portion of the huge Shadow Valley-Cima Dome Joshua tree forest, one of the densest concentrations of Joshua trees in the southwest. The vegetation of WSA 222 is diverse and consists of, in addition to the unusual plant assemblages, saltgrass meadow, allscale scrub, Psammophyte scrub, creosote bush scrub, blackbrush scrub, Utah juniper-one leaf pinyon woodland, and big galleta scrub steppe.

Most of the rare plant species within WSA 222 are limestone endemics. Among these species are:

Penstemon palmeri	Oryzopsis micrantha
P. calcareus	Stipa arida
Buddleja utahensis	Muhlenbergia arsenei
Fendlerella utahensis	Astragalus cimae var. cimae
Eriogonum heermanni var. floccosum	Agave utahensis var. eborispina
Forsellesia pungens var.glabra	Ephedra funerea

Another group of rare plants are those restricted to saline and alkaline soils (malophytes). Two species in WSA 222 fall into this category: Cordylanthus tecopensis and Centaurium namophilum. Other rare plants of uncertain affinities are: Festuca arizonica, Erioneuron (Tridens) pulchellum, and Galium hilendiae ssp. kingstonensis.

Wildlife

Wilderness Study Area 222 has very diverse topography, with elevations ranging from 600 feet to 7,323 feet at Kingston Peak. The area contains several mountainous areas, including Shadow and Kingston Mountains, sand dunes (Dumont), and riparian areas (Salt Creek, Amargosa Gorge). Wildlife habitats range from dune and creosote plant associations, to pinyon-juniper associations in the higher mountains, and a stand of white fir in the Kingston Mountains. The last is one of three white fir stands known in the CDCA. It supports a number of wildlife species found in no other desert habitat.

Twenty-four special wildlife species are known from this WSA. One State-listed species, the California yellow-billed cuckoo (8 square miles) is found in the WSA but is restricted to the riparian habitat along the Amargosa River Gorge. A BLM sensitive species, desert tortoise, is found in the WSA in a portion of the Shadow Valley Desert Tortoise Habitat. Tortoises are found in densities of 20-50 per square mile (7 square miles) and 50-100 per square mile (4 square miles).

Nine proposed BLM sensitive species are also found within the WSA. These include the Amargosa River pupfish (12 linear miles) and the Nevada speckled dace (12 linear miles), both of which are restricted to the Amargosa River; golden eagle (105 square miles of forage area and 2 eyries); vermilion flycatcher (10 square miles); least Bell's vireo (10 square miles); summer tanager (8 square miles); and desert chipmunk (40 square miles); Amargosa vole (3 square miles); and desert bighorn sheep (Kingston Mountains herd, permanent range of 45 square miles; concentration area of 5 square miles). Thirteen significant species are also found within this WSA. These species include potential range for the Amargosa toad (4 square miles); Mojave fringe-toed lizard (60 square miles); Utah black-headed snake (1 site); prairie falcon (45 square miles of forage area and 2 eyries), gray vireo (8 square miles); Virginia's warbler (1 site); yellow warbler (12 square miles);

yellow-breasted chat (8 square miles); hepatic tanager (9 square miles and breeding locality); California myotis (1 site); western pipestrelle (2 sites); rock squirrel (13 square miles); and mule deer (55 square miles). Several wildlife species have significant portions of their range in this WSA, including the Kingston Mountains chipmunk (80%); Amargosa vole (50%); and Kingston Mountains desert bighorn sheep (80%), currently estimated at 30 individuals.

Other valuable areas for wildlife include 11 documented water sources scattered over the WSA, three ACECs, and one area which was proposed as an ACEC. The ACECs are Amargosa Gorge, portions of the Kingston Mountains, and Salt Creek Riparian Area. The Shadow Valley Tortoise Area was proposed as an ACEC but was not accepted. Approximately 70 percent of the Amargosa Gorge, 70 percent of the Kingston Mountains, and 25 percent of the Salt Creek ACECs are presently within this WSA.

Cultural Resources

A number of archaeologically sensitive areas occur throughout this proposed WSA. Approximately 4 square miles of very high sensitivity/significance are located in the northwestern portion of the polygon. Seven square miles of high sensitivity are located in the northeast section of the polygon, and 5 square miles of high sensitivity are located in the south-central portion. Two linear miles of high sensitivity are located in the southwest area (Old Railroad Grade). Many site types are represented in these areas, including temporary camps, rock art, rock shelters, lithics, milling stations, and historic sites.

Native American Uses, Needs, and Sites

No Native American resources are currently reported for this wilderness area. The territory has been in traditional use by the Panamint Shoshone and Chemehuevi. Estimated potential resources would occur at sites associated with seasonally active springs in the foothill areas.

Scenic Quality

This study area has an overall scenic quality rating of medium. It includes all or portions of seven scenic quality polygons with ratings spanning the range from low to very high. The major portion of the area falls within two large scenic quality polygons that rated low-medium overall. The two significant visual features in the area are the Kingston Mountains and Amargosa Canyon, both of which rated high. Both received high uniqueness ratings for their interesting and highly diverse vegetation and topography, with Amargosa Canyon receiving a bonus score for the presence of water, a dominant feature in that area.

General Recreation

There are six interpretive sites in the WSA. The Kingston Mountains were rated high and are notable for a select white fir stand, bighorn sheep, and

the Panamint chipmunk. Horsethief Springs was rated medium with both prehistoric and historic values. The Shadow Mountains were rated medium with geology as the major interpretive resource. Two of the unevaluated sites, Dumont and Sperry, were once towns along the now abandoned Tonopah-Tidewater Railroad. The third unevaluated site is the Sperry Wash Canyon known for some of the finest petrified wood in the desert.

There are three teaching and research areas in the WSA. The sites receive up to seven, four, and one annual visits from colleges and universities, respectively.

A good floral display area, the Dumont Dunes, is known for yellow primrose and others.

The Amargosa Canyon, Dumont Dunes Natural Area, and the Amargosa River National Natural Landmark are located in the WSA. In addition, the Kingston Mountains are named as a Primitive Area. Amargosa Canyon is closed to motorized vehicle use under the ICMP. There is good deer hunting in the Kingston Mountains. Three identified rockhounding sites are: Sperry, rated as excellent; Kingston Mountains, rated as good; and Tecopa Pass, rated as fair. Horsethief Springs is a good birdwatching area in the WSA. Another excellent birdwatching area is the Amargosa River, with over 150 species reported, including waterfowl and 11 raptors.

There are two concentrated use zones. One of these borders the southwestern edge of the WSA and had 8,834 visitor use days (VUDs) in 1978 (mostly motorized vehicle touring) of which a small portion occurred in the WSA. The second is Amargosa Canyon, which received 3,027 VUDs in 1978. Uses include hiking, birdwatching, nature study, education and research, and illegal entry to the ICMP-closed area for motorized vehicle touring.

Range Uses and Potential

The WSA contains portions of Horsethief Springs allotment (grandfathered), Valley Wells allotment (grandfathered), and proposed Tecopa allotment (not grandfathered). A portion of the Clark Mountain Herd Management Area is in the WSA.

SUMMARY OF PUBLIC COMMENT

Inventory Phase

Comments directed to the inventory included: (1) a map correction for the location of Baker; (2) statements on unnatural areas that have been excluded; (3) agreement on the naturalness of the area meeting wilderness criteria; and (4) questions on the validity of deletions. The area has been extensively field checked to verify public comments. A few minor boundary changes have been made.

Study Phase

Forty of the 74 letters received on WSA 222 opposed wilderness designation. Existing mines, their access, and potential mining were the most common opposition concerns. Mineral potential for oil, gas, geothermal energy, lead, zinc, silver, gold, copper, iron, and talc was discussed. The Silurian Hills were specifically mentioned as a high potential mineral area. Several sights and sounds were listed as detracting from the area's wilderness potential. Transmission lines, noise from vehicles, ranch and mine activities, and highway traffic were listed. Recreational interests were strongly shown for motorized vehicle use, camping, and rockhounding (travertine and onyx).

A corridor through the area was requested for a coal slurry transport system. A boundary change was requested to exclude a mine area.

In the letters supporting wilderness designation, the dunes were often discussed as transition area and buffer for Amargosa Canyon. Geologic, biologic, and scenic values of wilderness were all mentioned. Amethyst and quartz outcrops were scenic elements specifically noted. Unique wildflowers, "giant nolinas," white fir on Kingston Peak, saltbrush, riparian habitat, Utah black-headed snakes, and western red-tailed skinks were all mentioned for protection.

Inclusion of Dumont Dunes, Amargosa Wash, and the southern Silurian Hills to complete viewsheds and ecosystems was repeatedly suggested.

Many comments were received in response to the workbook. Some comments received in support of wilderness designation desired protection of wildlife and restriction of motorized vehicle use. Some comments desired boundary adjustments to eliminate uses incompatible with wilderness. Some wanted continued access to geological features, and one commentor considered mineral development a better use for for the area than wilderness.

Draft Plan Alternatives

A variety of public comments specific to WSA 222 was received in response to the Draft Desert Plan. For example, one indicated complete agreement with the Protection Alternative. Another expressed the need for adding more acreage as suitable for wilderness under the Protection Alternative (e.g., land up to State Route 127, the Kingston and Shadow Mountains). A third insisted that the entire study area be recommended as suitable for wilderness under the Balanced Alternative while another called for recommending the Cady Mountains as suitable for wilderness under the Balanced Alternative. Also, the use of ecological boundaries for wilderness, and buffer zones surrounding the wilderness area were suggested. Support was also expressed for the Balanced Alternative. Some thought the best use for the area is to perpetuate vehicle access for rockhounders. In addition, one stated that the exploration and development of oil, gas, and geothermal resources were the best uses for the Wilderness Study Area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Approximately 15 percent of Wilderness Study Area 222, Kingston Range, is recommended as suitable for wilderness designation. This recommended area is roughly limited to the Kingston Range. Although the study area was rated very high (6), the significance of competing resources resulted in a division of the area into three classes.

Conflicts between mineral resource values and wilderness values in that portion recommended as wilderness were identified, but it was decided that wilderness represented the highest and best use when considered in terms of the desert-wide wilderness objectives.

The entire area has a history of mining exploration and development. There are known occurrences of many minerals and the site possesses the potential for many more. A majority of the WSA has been identified as prospectively valuable for oil, gas, sodium along with known recreation demands and grazing allotments were weighted against the corresponding high natural and cultural resources. The remaining area was divided into Class L and Class M.

The Class L designation will protect the majority of sensitive cultural sites and wildlife and vegetation resources, while permitting access and mineral development. In the areas classified as M, recreation, mineral development, and grazing were primary considerations.

These compromises in land classifications were necessary to meet the legitimate demands of all resources represented in the area.

IMPACT OF PROPOSED PLAN

Division of the area equally between Class L and M designation would significantly impact the wilderness and scenic values. Mineral exploration and development, range improvements, and organized motorized vehicle activities on existing roads and trails could not be absorbed on this flat terrain. With mitigation some activities could be located within the hills and mountains with less severe impacts.

WILDERNESS STUDY AREA 222A

Silurian Valley

GENERAL DESCRIPTION

The northern boundary of this area (17,960 acres)[1] is the dirt road from State Route 127 running east to Riggs. The northeast boundary is the graded road from Riggs Road to the Silver Lake mine. The eastern boundary is the dirt road running south from the Silver Lake Mine Road, 1 1/4 miles to Riggs Wash. The southern boundary of the Wilderness Study Area is the northern edge of the utility right of way which contains power transmission lines (except where a service road may extend outside the right of way). The western boundary is State Route 127. Approximately 5 percent of this area is non-public lands. The records indicate that the east half of Section 15, T. 15 N., R. 8 E. was established as a highway maintenance station for the State of California (CALTRANS) on September 20, 1935. This WSA is 75 percent alluvial fans, 20 percent hills, and 5 percent pediments.

WILDERNESS QUALITY

Description of Environment

The area includes approximately 27 sections of land with about eight sections of rocky, rolling hills in the southeast portion. Riggs Wash runs through the northeast corner of the area. A large creosote-covered bajada makes up the remainder.

Natural Condition

The deserted Tonopah-Tidewater railroad bed runs through the area; it is of historic significance.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Due to the extensive bajada, large rolling hills, and naturalness, opportunities for a primitive and unconfined type of recreation are outstanding. Outstanding opportunities for solitude are available in the small mountainous region of the south.

WILDERNESS STUDY AREA RANKING

The WSA is ranked 123 out of 137 WSAs.

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[1]Portions of T. 15 N., Rs. 8 and 9 E.; and T. 16 N., Rs. 8 and 9 E., SBM.

RESOURCES CONSIDERED

Geology-Energy-Minerals

There is potential for oil, gas, and sodium in the northwestern part of the WSA, but no exploration or development has occurred. Exploration of these resources could probably take place from outside the WSA boundaries. The eastern, rocky part of the WSA has potential for gold and copper in both Pre-Cambrian metasediments and Mesozoic intrusive rocks. The Pre-Cambrian units also have potential for limestone, dolomite, and silica and excellent potential for talc. Sand and gravel can be found in the alluvium-filled basins, and the proximity to roads and to Baker make this a probable source of such materials.

Vegetation

No unusual plant assemblages occur within WSA 222A. Vegetation consists mostly of creosote bush scrub and allscale scrub. No rare plant species are known to occur within this WSA.

Wildlife

While there are no significant wildlife values in this area, future inventories may reveal more than the typical desert fauna.

Cultural Resources

Approximately 1 square mile of high sensitivity/significance is located in the area. Known sites in the vicinity represent historic mining activities. The area has not been systematically surveyed, however.

Native American Uses, Needs, and Sites

No Native American resources are currently reported for this WSA. The territory has been in traditional use by the Panamint, Shoshone, and Chemehuevi. Estimated potential resources would occur at sites associated with seasonally active springs in the foothill areas.

Scenic Quality

The study area includes portions of two large scenic quality polygons and has an overall scenic quality rating of "low-medium." The valley area received low scores for landform and color and medium scores for vegetation and uniqueness. The hilly area received low scores for landform and uniqueness and medium scores for color and vegetation.

General Recreation

No known recreation resources exist in this WSA.

Range

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

No comments were received.

Study Phase

No comments were received in response to the workbook.

Draft Plan Alternatives

The following range of public comments specific to WSA 222A was received in response to the Draft Desert Plan. One agreed with the Protection Alternative, another desired additional lands (e.g., the entire range, or up to State Route 127) be recommended as suitable for wilderness in the Protection Alternative, while another insisted that the entire study area and the Cady Mountains be recommended as suitable for wilderness in the Balanced Alternative. In addition, one stated that the exploration and development of oil, gas, and geothermal resources under the No Action Alternative were the best uses for the area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 222A, Silurian Valley, is recommended as nonsuitable for wilderness designation.

The area rated very low in relation to the other study areas. This together with the fact that the area is adjacent to known mineralized locations and exhibits a potential for mineral development and oil and gas exploration were major considerations. The area did not meet the desert-wide wilderness objectives.

The entire WSA is recommended for Class M designation to permit mineral development and to provide for increased recreation opportunities.

IMPACT OF PROPOSED PLAN

The area is recommended for Class M. All wilderness and scenic values would be compromised by activities permitted under the guidelines. The significant impacts resulting from this designation could not be mitigated.

WILDERNESS STUDY AREA 223

North Mesquite Mountains

GENERAL DESCRIPTION

The area[1] contains 25,500 acres. The west boundary is the Excelsior Mine Road. The south boundary is the Kingston Road. The north boundary is a road that branches east from the Excelsior Mine Road, goes south by the Snow White mine, and turns south to meet the Kingston Road. The area contains four sections, or approximately 10 percent, of non-public land. There are at least two mining claims in the southern tip of the study area. This WSA contains 45 percent hills, 45 percent alluvial fans, 5 percent dissected fans, 3 percent pediments, and 2 percent riverwashes.

WILDERNESS QUALITY

Description of Environment

This area is located north of the Mesquite Mountains and contains interesting geological features and vegetative types. The southwestern portion contains a gradually sloping bajada which is covered with a variety of plants, such as creosote bush, Joshua trees, yucca, assorted varieties of cacti, and several desert shrub and native grass species. Farther north, a cluster of mountains and medium-sized buttes spread to the north and east, changing into steep, rugged mountains. This area contains a relatively small cove garden containing various species of cacti, an extensive, dense stand of Joshua trees, and assorted desert shrubs and native grasses. The eastern portion contains a wide horseshoe-shaped valley that is almost completely surrounded to the south by the rugged mountains and to the west and north by lower foothills. Creosote covers the entire valley, except for the small island in the middle. Scattered portions of cacti, desert shrub, native grasses, and isolated Joshua trees are also found. The northern and western portions contain a limited variety of terrain. Rolling brown foothills with a few steeper mountains in the western portion comprise the major reddish-brown geologic features. The vegetation there is dominated by creosote, but also supports desert shrub species, cacti, and isolated stands of Joshua trees.

Natural Condition

The imprint of man's work is evident in a small portion of the northern one-third of the area. This occurs in the form of abandoned mining activity in Section 31 (T. 18 N., R. 12 E.) and unsurveyed Section 11 (T. 19 N., R.

[1]Portions of T. 16 N., R. 9 and 10 E.; T. 17 N., R. 7, 8, 9 and 10 E.; T. 18 N., R. 7, 8, 9 and 10; T. 19 N., R., 7, 8, 8-1/2, 9, 10 and 11 E.; T. 19-1/2 N., R. 6, 7, 8, 9, 10 and 11 E.; T. 20 N., R. 9 and 10 E., SBM.

11 E.). Roads to these mining areas have been excluded from the areas possessing wilderness characteristics. This activity is in a relatively localized area and is of little impact to over-all naturalness. A short, well-maintained road following a grazing allotment fence penetrates the area from the west and has also been excluded from the Wilderness Study Area. Elsewhere, the works of man are substantially unnoticeable. The primeval character of the land is retained in the area suited for wilderness study.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

This area's size, shape, diversity of geological landforms, and vegetation all contribute to an outstanding opportunity for solitude. In addition, outstanding opportunities for a primitive type of recreation are found in the diverse landforms of the area.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 125 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Eleven prospects and three adits are shown on the Kingston Peak and Clark Mountain topographic maps within this WSA. Though the mineralization encountered in these workings is unknown, gold, silver, lead, copper, and zinc have been found in similar rocks in nearby areas. Oil and gas leases may have been issued over part of the WSA and lease applications are pending in other parts of the area. Limestone, dolomite, and silica (quartzite) occur in the Mesquite Mountains. However, as yet, there has been no development of these resources.

Vegetation

No unusual plant assemblages occur within WSA 223. The makeup of the vegetation consists mostly of creosote bush scrub, blackbrush scrub, and big galleta scrub steppe. Two rare limestone endemics (Buddleja utahensis and Epliedia funesea) occur within WSA 223.

Wildlife

The area has not been adequately inventoried. No known listed or sensitive species occur in the area.

Cultural Resources

No cultural resources are known to exist in the WSA. However, the area has not been systematically surveyed, and sites are predicted in the vicinity.

Native American Uses, Needs, and Sites

No Native American resources are currently documented for this WSA. It is the traditional territory of the Panamint Shoshone and Chemehuevi. Potential resources occur at sites associated with seasonally active springs in the foothills.

Scenic Quality The area has an over-all "low-medium" scenic quality rating. The major part of the area received a medium rating with medium scores given for all the key factors.

General Recreation

No known recreation resources exist in this WSA.

Range Use and Potential

This WSA contains portions of Horsethief Springs and Valley Wells allotments and a portion of the Clark Mountain Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Most comments were in support of the findings.

Study Phase

Seven letters were received on Area 223. Four favored a wilderness designation for varied reasons. One wanted to see a rare plant, the Penstemon stephensii, protected. This letter also suggested that the northern portion of the Mesquites west of Winter Pass be added to the area. Scenic quality and primitive recreation were other concerns. One letter urged the allowance of roads that meet the definition for corridors into wilderness areas.

The letters opposing Wilderness designation spoke of the existence of mines and roads.

One comment desiring more public access to the study area was received in response to the Public Input Guidelines for the Wilderness Study Phase (Workbook, 3/15/79).

Draft Plan Alternatives

The following range of comments specific to WSA 223 were received in response to the Draft Desert Plan. One was in complete agreement with the Protection Alternative, another expressed agreement with the Balanced Alternative, while a third called for the entire study area being recommended as suitable for wilderness under the Balanced Alternative. In addition, some were in favor of wilderness with existing vehicle access routes for use by rockhounds.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The North Mesquite Mountains Wilderness Study Area (223) is recommended as nonsuitable for wilderness designation.

Known mineralization from surrounding areas indicates that a potential exists within the area and the site supports two grazing allotments, Horsethief Springs and Valley Wells. The WSA does not possess any of the values outlined as "desert-wide wilderness opportunities." Since the competing resource values were low, it was determined that the highest and best use of the land would be found in a less restrictive multiple-use classification.

The Wilderness Study Area is recommended for Class L designation. The classification would allow access for support of grazing facilities and mineral exploration and would protect the site until adequate surveys of other resources can be completed.

IMPACT OF PROPOSED PLAN

The entire WSA is recommended for Class L. Impacts from activities permitted by the guidelines would impact the flat and low, rolling bajadas surrounding the mountains. The mountain area could absorb some activities if properly mitigated and managed. Motorized vehicle use on designated routes would affect the naturalness.

WILDERNESS STUDY AREA 225

Mesquite Mountains

GENERAL DESCRIPTION

This triangular area (48,700 acres)[1] is bordered on the northeast by the Old Traction Road, on the east by the graded road for the Umberci Mine, and on the west by the Kingston Road. The southern boundary of the WSA is the northern edge of the utility right of way which contains power transmission lines. This boundary is located along a line 400 feet north of the three existing transmission lines (except where a service road may extend outside of the right of way). The area includes approximately six sections of non-public land scattered throughout the area and accounting for approximately 10 percent of the total land area. There are a number of recorded mining claims in the eastern and southeastern portions of the study area. This WSA contains 50 percent hills, 35 percent alluvial fans, 13 percent dissected fans, and 2 percent highly dissected fans.

WILDERNESS QUALITY

Description of Environment

The area contains a portion of both the Mesquite Mountains and the Clark Mountain Range. The western portion of the Mesquite Mountains has more gradual rising slopes than does the abrupt and steep eastern face. The Clark Mountain Range, which crosses the southeastern corner of this area, is rough and rocky with numerous small caves in the porous rock. Bajadas and the southern extremity of Mesquite Valley are an integral part of the area. Extensive stands of Joshua trees, yuccas, cactus, and annuals grow on the western portion, while creosote bush is the dominant plant in Mesquite Valley.

Natural Condition

The majority of the area is affected primarily by the forces of nature with man's work substantially unnoticeable. A way bisects this area over Mesquite Pass, once used for access to an airway beacon. A small cement foundation remains where the beacon once existed. The way and foundation have minimal impact upon the area as they are relatively insignificant and visible from only a small portion of the area. The eastern edge has mining exclusions at the State Line mine for a house, cement shed, mining tunnel, and associated road. Along the first 2.5 miles of the northern access to the Umberci mine, there is an exclusion for open pit mining and associated roads.

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[1]Portions of T. 17 N., Rs. 12, 12-1/2, 13, and 14 E.; T. 18 N., Rs. 12, 13, and 14 E.; T. 19 N., Rs. 12 and 13 E.; T. 20 N., R. 12 E., SBM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Due to the relatively large size and conformity of this area, combined with numerous narrow canyons, rough rock ridge, and thick stands of Joshua tree and yucca, opportunities for solitude are outstanding. This area also contains diverse topographic features which add to the outstanding opportunities for a primitive and unconfined type of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 83 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

In the south-central part of the WSA (Sec. 8, T. 17 N., R 13 E) there have been shipments of copper ore from the Calarivada mine. On the east side, just outside of the WSA, there has been considerable work at the Shire gypsum deposit; however, it is not known if there has been any gypsum production. There have been numerous prospects in the northwestern part of the WSA. There are 27 unpatented mining claims in this WSA.

Vegetation

Vegetation is similar to WSA 223. A small portion of the Shadow Valley/ Cima Dome Joshua Tree forest occurs in WSA 225. No rare plant species are known to occur in this WSA.

Cultural Resources

Approximately 7 square miles of very high sensitivity/ significance are located in the southern portion of the WSA in the Clark Mountain area. Sites in this region include temporary camps, lithics, etc. The remainder of the area has not been systematically surveyed.

Native American Uses, Needs, and Sites

No Native American resources are known for this WSA.

Wildlife

Clark Mountain contains one of the richest floras and faunas of the desert. Approximately 45 percent of the unique environment is present in this WSA. The mountain range contains a desert bighorn sheep herd of approximately 40 individuals, 2 square miles of permanent bighorn range, and 7 square miles of seasonal range. This includes approximately 15 percent of the total range used by this bighorn herd. Habitats support approximately 3 square miles of Panamint chipmunk range and 15 square miles of mule deer range. The habitat also contains approximately 8 square miles of golden eagle foraging area.

The lower elevations of the Shadow Valley contain 4 square miles of desert tortoise range with density of 20 to 50 per square mile.

Scenic Quality

The Study Area covers at least four scenic quality polygons and has an over-all "medium" scenic quality rating. The major portion of the area falls within two scenic quality polygons that received medium ratings. The valley portion received a low score in landform and medium scores in color, vegetation, and uniqueness, while the mountain portion received medium scores for all key factors.

General Recreation

Hunting opportunities are rated good for deer in portions of the area. No other recreation resources are known.

Range Uses and Potential

This WSA contains a portion of Valley Wells and Clark Mountain Allotments. The Clark Mountain Herd Management Area also is partly in the WSA.

SUMMARY OF PUBLIC COMMENT

Inventory Phase

Those comments specific to inventory considerations involved agreement with values mentioned in the findings but disagreement with road determinations. These roads were field-checked, and no changes in their designation were necessary.

Study Phase

Nineteen letters were received on WSA 225. Eleven opposed a wilderness designation, listing mineral potential and sites and sounds as reasons of opposition. Transmission lines, roads, and airway beacons were sites listed as detracting from the area's wilderness potential. Minerals such as copper, lead, silver, gold, and fluorite were specifically mentioned. The Mesquite Mountains and Clark Mountain were listed with high mineral potential. Concern was also expressed for allowance of geothermal exploration and development. A coal slurry transport system is proposed through this area, and its allowance was urged in one letter. Grazing concerns were also expressed.

The letters favoring a wilderness designation mostly dealt with scenic and biological values. The Clark and Kingston Peaks migratory bird havens and gila monster were both urged for protection. The "outstanding" cactus garden in the southeastern, higher elevations, and the rich creosote bush community in the lower elevations were also discussed for preservation. Protection of artifacts found on bajadas and dry lake beds was urged. Primitive recreation desires were expressed, specifically cross-country hiking.

One letter felt roads should be included because the terrain conceals them. Another felt the Keany Pass powerline corridor detracts from wilderness values at the boundary.

Workbook Comments

Some comments were received in response to the Public Input Guidelines for the Wilderness Study Phase (Workbook March 15, 1979). A comment described additional study of the area before wilderness designation. Another comment requested a boundary change to delete part of the WSA.

Draft Plan Alternatives

The following range of comments specific to WSA 225 was received in response to the Draft Desert Plan. One was in complete agreement with the Protection Alternative, another expressed agreement with the Balanced Alternative, while a third called for the entire study area being recommended as suitable for wilderness under the Balanced Alternative. In addition, some were in favor of wilderness with existing vehicle access routes for use by rockhounds. Also, one stated that the exploration and development of oil, gas, and geothermal resources under the No Action Alternative were the best uses for the study area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Mesquite Mountains Wilderness Study Area, 225, is recommended as nonsuitable for wilderness designation.

Historically, the site includes a past producer of copper, and known mineralization occurs on the periphery. In terms of general recreation, hunting within the area is considered to be good. The area supports portions of two grazing allotments.

This Wilderness Study Area was rated in the lower half of all the areas and does not possess the values outlined as "desert-wide wilderness opportunities." Generally, competing resource values were considered to be low; so it was decided that the highest and best use of the area would be in a less restrictive multiple-use category.

This WSA is recommended for Class L designation. This would provide the required access to continue mineral exploration, recreation, and grazing support, while protecting both the natural and cultural resource values.

IMPACT OF PROPOSED PLAN

The area is recommended for Class L. Those areas of the WSA that are flat or low rolling could not absorb the impact from activities permitted by the guidelines; the impacts would be severe. Grazing at existing levels could continue. The Mesquite Mountains are rugged, and a certain amount of activity might be compatible if properly mitigated. Motorized vehicle use along designated routes would affect the naturalness of the area.

WILDERNESS STUDY AREA 225A

Stateline

GENERAL DESCRIPTION

This small area (8,105 acres)[1] is bordered on the northeast by the State Line Pass Road, on the north by the Old Traction Road, and on the west by the graded road for the Umberci Mine. The southern boundary of the Wilderness Study Area is the northern edge of the utility right of way which contains power transmission lines. This boundary is located along a line 400 feet north of three existing transmission lines (except where a service road may extend outside the right of way). This area is entirely public land. There are several recorded mining claims in the study area. This WSA contains 65 percent hills and 35 percent alluvial fans. Most soils in the WSA are highly sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

This is a rough, rocky, isolated section of the Clark Mountain Range which includes a myriad of small caves and openings in the porous rock. Vegetation is sparse in this area, with creosote bush and yucca scattered around the base of the range.

Natural Condition

This area is primarily affected by the forces of nature with man's work substantially unnoticeable. Mining exclusions have been made along the western border at the Umberci Mine and along the associated road. A primitive way is located in the southeast corner but the effect upon the naturalness of the area is insignificant.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Due to the rugged character of this portion of the Clark Mountain Range and related caves and canyons, outstanding opportunities for solitude or a primitive and unconfined type of recreation can be easily found.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 108 out of 137 WSAs.

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[1]Portions of T. 17 N., R. 14 and 15 E. and T. 18 N., R. 15 E., SBM.

RESOURCES CONSIDERED

Geology-Energy-Minerals

The Umberci and Kalley mines, past producers of lead-silver-zinc-copper ore, are adjacent to the western border of the WSA. The Shire gypsum deposit adjoins the WSA northwest of the Kalley mine. As of December 1979, there were 31 unpatented mining claims recorded with the BLM in Sec. 5, T. 17 N., R. 14 E. There were also six claims in Sec. 6, 3 in Section 7, and 12 in Section 8. Some of the workings of the Umberci mine have been included in the WSA. It is likely that mineralization occurs in the WSA near these mines and elsewhere within the area.

Vegetation

No unusual plant assemblages occur within WSA 225A. The makeup of the vegetation is similar to WSA 225. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

Despite the relative lack of vegetation the WSA still partially supports the Clark Mountains desert bighorn sheep, estimated at approximately 40 individuals. The WSA encompasses 12 square miles of permanent range for the herd and represents about 25 percent of the herds total range and 35 percent of the total permanent range. Mule deer also concentrate in the Clark Range; 10 square miles of mule deer habitat occur in the study area. Finally, 16 square miles (8%) of the Clark Mountains ACEC is within the boundary of this WSA.

Cultural Resources

Approximately 3 square miles of high sensitivity/significance are located along the eastern boundary of the WSA. Sites recorded include rockshelters, lithics, ceramics, and roasting pits. At least five sites per square mile can be predicted in this region.

Native American Uses, Needs, and Sites

No Native American resources are currently reported for this WSA.

Scenic Quality

The study area has an overall "high-medium" scenic quality rating. It is dominated by the northern Clark Mountains, which received medium scores for all key factors. The visual quality is moderately enhanced by views to the adjacent Clark Mountains and other nearby mountains and valleys.

General Recreation

Hunting opportunities are rated as good for deer in the WSA. No other recreation resources are known to exist in the WSA.

Range Uses and Potential

The WSA is in the Clark Mountain allotment and the Clark Mountain Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Most comments stated the area merited wilderness study status. The area was rechecked and found to meet the Wilderness Act criteria except for mining exclusions.

Study Phase

Eight letters were received on area 225A. Six favored a wilderness designation for the area. Primitive recreation opportunities were mentioned -- specifically, photography, painting, exploration, hiking, backpacking, and camping. A few letters discussed roads in the area and felt the rugged terrain concealed them. Unique features of cave and limestone formations were mentioned. One letter suggested including the southern Mesquite Mountains and Clark Mountain range in this area.

The letters opposing wilderness designation spoke of needed access for a coal slurry transport system and sites and sounds of transmission lines and roads which influence an area up to two and a half miles around them.

Workbook Comments

One comment requesting more study prior to wilderness designation was received in response to the Public Input Guidelines for the Wilderness Study Phase (Workbook, 3/15/79).

Draft Plan Alternatives

The following range of public comments specific to WSA 225A were received in response to the Draft Desert Plan. One was in agreement with the Protection Alternative, while another agreed with the Balanced Alternative. A third was in favor of wilderness with vehicle access routes for rockhounders.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Stateline Wilderness Study Area (225A) is recommended as nonsuitable for wilderness designation.

Known past producing mining operations exist on the periphery of the WSA, and the potential for mineralization associated with these activities is expected to extend into the Wilderness Study Area. The area supports the Clark Mountain grazing allotment, and hunting in the area has been rated as good. The WSA does not possess any of the values outlined as "desert-wide wilderness opportunities." Although competing resource values were low, it was determined that the highest and best use of the land would be found in a less restrictive multiple-use classification.

The Wilderness Study Area is recommended for Class L designation. This classification would allow access for mineral exploration, recreation, and grazing, while protecting the known cultural and natural resource values.

IMPACT OF PROPOSED PLAN

Activities permitted by the guidelines for Class L would impact the flat and low, rolling bajadas surrounding the mountains. The mountain areas could absorb some activities if they are properly mitigated and managed. Motorized vehicle use on designated routes would affect the naturalness.

WILDERNESS STUDY AREA 227

Clark Mountain

GENERAL DESCRIPTION

Wilderness Study area 227 includes 15,000 acres.[1] The northern boundary of the area is the southern edge of the utility right of way which contains power transmission lines. This boundary is located along a line 400 feet south of the three existing transmission lines (except where a service road may extend outside the right of way). The boundary on the west is a blacktop road between Valley Wells and the north transmission line. On the south is a steel-structure powerline right of way and ranching and mining roads, and on the east is a bulldozed mining road between Antimony Gulch and the Colosseum Gorge Road.

The area includes approximately five sections of non-public land. These sections are scattered throughout the area and account for approximately 7 percent of the total land area. There are several recorded mining claims in the southwestern portion of the study area. This WSA contains 65 percent mountains, 15 percent hills, 10 percent dissected fans, and 10 percent alluvial fans. Most soils in this WSA are highly sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

This area includes the biologically unique Clark Mountain (7,900 feet). Various forms of cactus, agave, yucca, Joshua tree, pinyon pine, juniper, and a remnant population of white fir on Clark Mountain's summit are found within this area. Wildlife is highly varied and includes deer. The mountain mesa contains steep-walled, colorful rock formations which combine with the vegetation to create a unique desert-mountain ecosystem. The terrain surrounding Clark Mountain includes rolling, rugged hills, narrow canyons, and steeply sloping and open bajadas dissected with desert washes.

Natural Condition

Clark Mountain and the western bajada appear to be affected primarily by the forces of nature. Some old mines and mine structures are found within this portion of the area, but these man-introduced features add to the historical value of the land. Areas where man's work is substantially noticeable have been excluded from further wilderness consideration. A stock water tank and active mine operation with related equipment and a mobile home are found

[1]Portions of T. 16 N., R. 13 E. and T. 17 N., R. 12 and 13 E., SBM.

along the northwest border. Heavy and active mine operations which include bulldozer scraping, tailing dumps, buildings, and equipment are found in the Colosseum Gorge area, Ivahpah Spring area, and Mohawk and Mountain Pass Mine areas. The road into Pachalka Spring has also been excluded because of private ownership.

The Wilderness Study Area boundaries proceed along the north side of the road to Pachalka Spring across the lower portion of Section 31 to exclude the Copper World mine. It proceeds south along the Copper World mine road to the 5,000 feet contour line in Section 5, joining the south roadless area boundary at the west edge of Section 9. The boundary follows the powerline to Antimony Gulch in Section 2 but excludes access to the park area in Sections 33 and 34. The Wilderness Study Area boundary is common with the roadless area boundary to the Benson mine road in the center of Section 25. The boundary runs northwest along the road to Benson mine extending farther northwest to exclude shafts and access in the northwest and southeast corners of Section 22 and joining the northern roadless area boundary one-half mile west of Green's Well. It is common with the roadless area boundary into the northwest corner of Section 17 and follows a way, which shows no evidence of recent maintenance or continuous use but is a major scar, to Section 28 on the western roadless area boundary. This excludes a width approximately one and one half miles along the northern boundary where a dwelling, mining scars, and access routes are apparent.

Outstand Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Opportunities for solitude or a primitive and unconfined type of recreation are outstanding due to the diversity and variety of topography and vegetation. Thick stands of evergreens and conifers in this area, which includes rough, steep-walled mountainous countryside, adds to the area's ability to screen visitors from one another.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 43 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

WSA 227 is ringed by important past, present, and future mineral producing areas and includes a past productive mine. Northeast of the WSA millions of dollars of silver were produced from the Ivanpah mines about 100 years ago. The Colosseum mine contains enormous tonnages of gold ore to be mined in the future. Tungsten, lead, silver, zinc, and fluorite have also been mined.

Within the WSA, located just north of Pachalka Spring, the Kaipers mine produced small high grade tonnages of lead-zinc-silver ore. There are three additional occurrences just south of the WSA. The Copper World mine has produced many thousands of pounds of copper metal. Presently, gem quality

azurite is produced. It is possible that extensive copper mineralization occurs deeper, extending into the WSA.

As of December 19, 1979, there were about 11 unpatented mining claims recorded with the BLM in this WSA.

Vegetation

This WSA covers almost all of Clark Mountain and contains a high diversity of vegetation types because of the rather broad elevational gradient (about 1,100 to 2,400 meters). Three unique plant assemblages are partly or wholly contained within WSA 227. The largest white fir enclave (about 1,000 trees) of the eastern Mojave Desert occurs on Clark Mountain in steep, mesic, north-facing slopes and canyons between 1,905 and 2,345 meters on either granite or limestone strata. The grove covers about 65 hectares. The trees have basal diameters of between 70 and 20 centemeters and are from 17 to 20 meters in height. Estimated ages of these trees are 250 to 300 years. Part of the Shadow Valley-Cima Dome Joshua Tree forest occurs in WSA 227, and the limestone outcroppings on Clark Mountain support calaphyte communities containing many rare limestone endemics. The general makeup of the vegetation within the WSA consists of creosote bush scrub, blackbrush scrub, Utah juniper, one leaf pinyon pine woodland, succulent scrub, and big galleta scrub steppe.

Many rare plant species are contained within WSA 227; most of these are limestone endemics and include:

Stipa arida	Muhlenbergia arsenii
Oryzopsis micrantha	Astragalus cimae var. cimae
Eriogonum heermannii var. floccosum	Fendlerella utahensis
Forsellesia pungens var. glabra	Enneapogon desvauxii

Buddleja utahensis.

Erioneuron pilosum (Tridens pilosum) and Festuca arizonica, two grasses which are not calciphytes, also occur within the WSA. The latter species is not rare in Arizona and appears to be at the western limit of its range in this area.

Wildlife

Wildlife is abundant and diverse. Bighorn occupy 14 square miles of permanent range near the northern end of the WSA. This is approximately 30 percent of the total range of the Clark Mountains bighorn sheep herd, estimated at 40 individuals. Fifty percent of the permanent range used by the herd is located within WSA 227. A 16-square-mile deer concentration area exists in the area. There are 2 square miles of desert tortoise habitat with a density of 20 to 50 tortoises per square mile, two golden eagle eyries, 23

square miles of foraging habitat, 8 square miles of Panamint chipmunk habitat, 10 square miles of rock squirrel habitat, a breeding locality of the hepatic tanager, 13 square miles of Virginia's warbler breeding habitat, a known site of the hoary bat, a known site of the small-footed myotis, and two unique habitats (the Clark Mountains white fir forest [21 square miles] and the Shadow Valley Desert Tortoise Area [2 square miles]). Approximately 15 percent of the total Clark Mountain area, with its unique as well as representative habitats and associated wildlife species, is located in this WSA.

Cultural Resources

Approximately 30 square miles of very high sensitivity/significance are located throughout the proposed Wilderness Study Area. A number of springs are present in this region, as well as zones of pinyon/juniper.

Scenic Quality

The study area has a "very high" scenic quality rating. It is dominated by the Clark Mountains, which were rated outstanding. The Clark Mountains received high scores on landform, vegetation, and uniqueness and a high-medium score for color. The bajada area received medium scores for all key factors except landform, which was rated low. The uniqueness ratings for both areas are attributable to the interesting and diverse vegetation, while the vertical and rugged Clark Mountain terrain accounted for a higher uniqueness rating.

General Recreation

There are five interpretive sites in the WSA. Clark Mountain itself, rated high, has a variety of natural and historic themes including relict plant communities and bighorn sheep. Copper World mine, rated low, was a large, open-cut mining operation in the late 1840s; Ivanpah I, rated medium, was the first settlement in the East Mojave region, founded in 1867. Pachalka Spring, unrated, has perennial water and an outstanding cactus garden along the road to the springs. South Clark Mountains, unrated, is a scenic high elevation canyon with a potential for sightseeing and nature study and good deer hunting.

One teaching and research site, receiving one visit annually from pre-college, college, and university classes, is located within this WSA. There is excellent birdwatching throughout 80 percent of the WSA. Located within the WSA is the Clark Mountains Outstanding Natural Area and Natural Environment Area. There are good rockhounding opportunities in the WSA for many copper minerals such as malachite, chrysocolla, azurite, and for galena, cerussite, sphalerite, and smithsonite. The only concentrated use zone in the WSA receives 574 annual visitor use days (VUDs) and is located at Pachalka Spring. The main uses are camping, hiking, and education/research. There are two concentrated use zones immediately south of the WSA boundary with 16,116 and 4,029 annual VUDs each. These adjacent zones are associated with Mojave Hill and Mountain Pass.

Range Uses and Potential

This WSA falls within the Valley Wells allotment and the Clark Mountain allotment. It also falls within the Clark Mountain Herd Management Area.

SUMMARY OF PUBLIC COMMENT

Inventory Phase

Comments reflected the many values in the area. Many roads and mining areas were delineated and rechecked in the field. All known active mining claims and roads have been excluded, where warranted. A large number of comments challenged road evaluations in the findings, indicating that the potential Wilderness Study Area should be expanded due to the unique qualities of mountain interior areas.

Study Phase

Of 45 comments received on WSA 227, 22 opposed a wilderness designation. Mining and sites and sounds were the most common points of discussion. A transmission line, roads, mines, private property, and structures were sites listed as detracting from the area's wilderness potential. Minerals -- lead, silver, gold, copper, fluorite -- rare earths, and mineral areas such as Clark and Ivanpah Mountains were specifically noted. One letter requested an access corridor for a proposed coal slurry transport system. Grazing was also a concern discussed. Boundary suggestions were made to exclude the entire western side below 5,000 feet and to exclude the northern part because of man's influence. One letter desired recreation access for rockhounds who enjoy camping in isolated scenery.

The letters favoring a wilderness designation often spoke of scenic qualities and unique flora and fauna. Clark Mountain's rare plants and gila monster, unusual birds, fine cactus gardens below Pachalka Spring, and white firs were listed as unique features requiring protection. Several boundary alterations were suggested. One letter suggested extending the area's boundary to the south. Another urged further contemplation of mining impacts and redetermining of boundaries. Another suggested extending boundaries at least 4,000 feet eastward to encompass slopes and bajadas. Another felt wilderness should only be designated on mountain tops for white firs -- the rest of the area should be open for mining. Several letters recommended inclusion of Pachalka Spring. Hiking was a primitive recreation often listed as desired.

Some comments were received in response to the Public Input Guidelines for the Wilderness Study Phase (Workbook, 3/15/79). Comments were in favor of wilderness designation.

Draft Plan Alternatives

A variety of public comments specific to WSA 227 was received in response to the Draft Desert Plan. For example, one indicated agreement with the Protection Alternative, another expressed agreement with the Balanced

Alternative, while a third insisted that the Use Alternative be adopted. Another suggested that the entire planning polygon be recommended as suitable for wilderness under the Balanced Alternative. A geological Area of Critical Environmental Concern was proposed for the study area. In addition, one stated that vehicle access routes should be retained within wilderness areas.

SUMMARY OF RATIONALE FOR PROPOSED PLAN

The Clark Mountain Wilderness Study Area (227) is recommended as nonsuitable for wilderness designation.

The area has historically been a large producer of minerals and indications point to future potential. The study area supports a wide variety of motorized and nonmotorized recreational activities. Hunting and rock collecting as well as camping, hiking, and education opportunities are generally considered to be excellent. This Wilderness Study Area also falls within the Valley Wells grazing allotment.

Although the area rated high in terms of its relative wilderness qualities, it was determined that the value of the competing resources exceeded that of wilderness and that the highest and best use of the area would be one with fewer restrictions.

The area contains many natural and cultural values. In order to protect these, it was determined to recommend the Wilderness Study Area for Class L designation. This classification would permit the access required for mineral exploration, recreation, and maintenance of grazing facilities, while still protecting the scenic quality and other resource values.

IMPACT OF PROPOSED PLAN

The central 50 percent of the WSA is recommended for Class L. This rugged mountain area could absorb some mineral development, which would be localized by the diverse terrain if properly mitigated and controlled. Some reduction in wilderness and scenic values would result. Grazing could continue at existing levels without substantial impacts. Motorized vehicle use along designated routes would reduce naturalness of the area. On the surrounding bajada and foothills, activities permitted under the guidelines would result in impacts which would significantly reduce the wilderness and scenic values.

WILDERNESS STUDY AREA 228

Hollow Hills

General Description

This study area (27,750 acres)[1] is located northeast of Baker. The northern boundary of the WSA is the southern edge of the utility right of way which contains power transmission lines. This boundary is located along a line 400 feet south of the three existing transmission lines (except where a service road may extend outside the right of way). To the west the area is bounded by State Route 1 and a road just east of Baker, to the south by a woodpole utility line that parallels Interstate 15, and to the east by a road to a cabin and well at Cree Camp and an improved dirt road leading northwest to the powerline road. The area consists primarily of public land, with approximately 5 percent non-public lands in scattered parcels. This WSA contains 40 percent hills, 25 percent alluvial fans, 20 percent plains, and 15 percent dissected fans. Most soils in this WSA are highly sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

The topography of this area varies from flat to gently sloping bajada, then to low rolling hills, and gentle mountains. The bajada is interlaced with washes and slopes to the west towards Silver Dry Lake. Low rolling hills lead to the western Turquoise Mountains, a gentle range of mountains having smooth ridges and rounded peaks. Vegetation is dominated by creosote, while desert holly and other low desert shrubs and annual grasses are scattered throughout. Plant density is fairly uniform throughout the area with the exception of the western edge, where the vegetation becomes smaller and more sparse.

Natural Condition

The area generally retains its primeval character and influence; man's works are substantially unnoticeable. A small exclusion has been made around a road leading to the Jumbo mine from Cree Camp Road. The remainder of the area is affected primarily by natural forces. There are no permanent structures in the area.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

[1]Portions of T. 14 N., Rs. 8 and 9 E., and T. 15 N., Rs. 8, 9, and 10 E., SBM.

This WSA's washes, hills, and mountains insure areas where outstanding opportunities for solitude are available. Because of the topographical and vegetative diversity, and because of the naturalness of the area, outstanding opportunities for primitive and unconfined types of recreation exist.

Scenic Quality

The study area has an overall scenic quality rating of "low." It consists mostly of the Silver Lake Valley polygon, which received low scores for all key factors. A small portion of the study area is hilly and received medium scores for color and vegetation and low scores for landform and uniqueness.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 75 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

This area is composed of Pre-Cambrian metasedimentary rocks intruded by much younger quartz monzonite. Talc is associated with Pre-Cambrian carbonate units in the same geologic environment north of this WSA, in the southern Silurian Hills, and to the east near Turquoise Mountain. These carbonates have also been identified within the WSA. There is good potential for talc in Pre-Cambrian rocks in the northwestern part of the WSA. The Pre-Cambrian metasediments quartz monzonite are known to host copper and molybdenum (both strategic commodities) and gold and turquoise mineralization just east of the WSA. These deposits usually occur in late-stage, fracture-filling quartz veins which are also likely to be found within the study area. The Jumbo mine, a gold prospect in Pre-Cambrian schist, is located on the eastern boundary and probably continues into the WSA. A stream sediment geochemical sample from the wash which forms the eastern WSA boundary yielded the highest value for molybdenum in the northeastern CDCA. Rising prices for molybdenum, which is used as an alloy in steel, have spurred exploration for this metal. Some recent drilling near Turquoise Mountain located small but significant amounts of molybdenum. Values for tin, another strategic metal, were above the mean in geochemical samples taken in the northwestern part of the WSA.

The alluvial area in the southwestern part of the WSA is prospectively valuable for sodium, oil, and gas, according to classification by the USGS. Sand and gravel resources along the paved roads which form the southern and eastern WSA boundaries have good potential for development because of their accessibility and their proximity to markets.

Vegetation

No unusual plant assemblages occur within WSA 228. Vegetation within the WSA consists mostly of creosote bush scrub, desert holly scrub, and allscale scrub. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

About 3 square miles of this WSA are habitat for the Mojave fringe-toed lizard, a good indicator species for dune areas. The Mojave fringe-toed lizard is a species highly adapted to areas of fine, windblown sand; it is restricted to portions of the eastern and central Mojave Desert.

Cultural Resources

Approximately 2 square miles of high sensitivity/significance are recorded in the western portion of the proposed WSA.

Native American Uses, Needs, and Sites

No Native American resources are currently documented for this Wilderness Study Area. See WSA 222 for the remainder of description and impacts.

General Recreation

No known resources exist in this WSA.

Range Uses and Potential

Only a small portion of the Valley Wells Allotment is in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments relating to the inventory dealt primarily with man's influence outside the Wilderness Study Area or expressed agreement with the draft descriptive narrative. Some questioned parameters of the roadless area by questioning the definition of a "road" used to establish the boundaries. The Cree Camp Road has been added after further field checking.

Study Phase

Of 46 letters received on WSA 228, 43 opposed wilderness designation. Mineral potential in unnamed mountains north of Halloran Springs was noted for copper, molybdenum, gold, and talc. Turquoise was also listed. Recreation desires were the most common concerns: motorized vehicles, four-wheel driving, camping, and rockhounding. One letter stated that the area's economy depends on recreationists. Grazing concerns were also repeatedly expressed. Sights and sounds -- microwave tower, transmission line, road, wells, mines, urban structures, Interstate 15, and noise of jets from Air Force and other military training routes -- were listed as detracting from the area's wilderness potential.

One letter urged continued management of vehicle routes as indicated in the ICMP. Others suggested moving the study area boundaries 2-3 miles away from Baker and the highway so as not to interfere with community development.

The letters favoring wilderness designation requested the excluded northeastern portion of the area be re-instated.

Some comments were received in response to the workbook. One response favored restricting motorized vehicle use to preserve wilderness, while allowing mineral exploration. Another response favored a boundary change to enhance wilderness quality. Another letter favored multiple-use of the area.

Draft Plan Alternatives

No public comments specific to WSA 228 were received in response to the Draft Desert Plan Alternatives.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Hollow Hills Wilderness Study Area (228) is recommended as nonsuitable for wilderness designation.

The WSA was rated 75 in terms of its relative wilderness qualities and did not exhibit any qualities identified as desert-wide wilderness opportunities. The area was identified by USGS as prospectively valuable for sodium, oil, and gas, and it displays potential for talc. The area supports a portion of the Valley Wells grazing allotment. It was decided that the mineral values exceeded the wilderness values and that the highest and best use of the area would be one that permitted access for mineral exploration and general recreation.

The area was recommended for Class M. It was felt that this designation would provide a degree of protection for the natural and cultural resources identified in the area.

IMPACT OF PROPOSED PLAN

The Class M designation would result in the wilderness values of naturalness being endangered from increased motorized recreation activity and potential for mineral production. Various minerals are believed to be present, especially talc. Should development of this or other minerals occur in the area, all of the wilderness values probably would be lost because of the lack of physical relief.

The presence of the community of Baker and I-15 may also be a threat to the wilderness values in that access is good for motorized vehicle use. The possibility of this activity increasing within the WSA may depend on the availability of more desirable areas to the west near Barstow and the Los Angeles Basin.

WILDERNESS STUDY AREA 235A

Shadow Valley

GENERAL DESCRIPTION

The area (11,250 acres)[1] is located immediately south of Interstate 15 at Valley Wells. It is bordered on the northeast by Cima Road, on the northwest by a maintained road used by the Aiken Cinder mine, and on the south and southwest by cattle tank access roads. The area includes only one or two randomly placed sections of non-public land. There are a number of recorded mining claims in the northern and northeastern portions of the study area. This WSA is 90 percent alluvial fans and 10 percent hills.

WILDERNESS QUALITY

Description of Environment

Topography is flat with little variation from a group of hills on the northwest side. Soil is sandy and white. Two washes cut across the area north to south. Over a 6-mile route there is a general drop in elevation from 4,200 feet in the south to 3,760 feet in the north. Vegetation, which is also fairly uniform throughout, consists of a good growth of Joshua trees, which are more abundant in the south than in the north, and creosote bush scrub and brittle bush.

Natural Condition

Past and current cattle grazing has not damaged the naturalness of the land, which remains in an undeveloped primitive state. Man's work is substantially unnoticeable and primary effects are the result of natural forces.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Outstanding opportunities for solitude and a primitive and unconfined type of recreation are available. The northern section has sloping terrain with a small hill. The southern section is associated with the northern slope of Cima Dome.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 112 out of 137 WSAs.

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[1]Portions of T. 15 N., R. 12 and 13 E.; and T. 16 N., R. 12 E., SBM.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for geothermal energy resources. Two claims are recorded. Data are insufficient to interpret potential for other mineral resources.

Vegetation

Two unusual plant assemblages occur within WSA 235A. This portion of the Shadow Valley-Cima Dome Joshua tree forest contains the densest concentration of yuccas in the southwest. In addition, a Great Basin enclave of shadscale scrub vegetation (Atriplex confertifolia/Artemisia spinescens) is located within the vicinity of Valley Wells Ranch. This community is probably the direct result of cattle grazing. The vegetation of WSA 235A is comprised of creosote bush scrub, hopsage scrub, and big galleta scrub steppe, in addition to those unusual plant assemblages listed above.

One rare plant species (Astragalus cimae var. cimae) is known to occur within the study area. There is no evidence that this plant is threatened by livestock grazing. Its restriction to calcium-rich soils is the principal factor affecting its distribution. Since the genus Astragalus is largely toxic and in general these plants are considered to be invaders and weedy pests of range lands, it is possible that A. cimae var. cimae is favored by grazing. Close monitoring of populations and an analysis of this species for toxins could shed light on its status.

Wildlife

Wildlife species of interest in the Joshua tree woodlands are the gilded flicker and the Bendire's thrasher.

Cultural Resources

No known recorded sites occur within the bulk of this WSA.

Native American Uses, Needs, and Sites

No specific Native American resources are currently documented for this Wilderness Study Area. This region has been traditionally used by Panamint

Shoshone and Chemehuevi. Potential resources would occur in the mountain areas near seasonally used springs.

Scenic Quality

The study area has an overall scenic quality rating of "medium." The major portion of the WSA falls within the Shadow Valley scenic quality polygon, which received a medium rating.

General Recreation

This WSA is part of a Natural Environment Area. No other recreation resources are known to exist in the WSA.

Range Uses and Potential

This WSA falls within the Valley View Allotment.

SUMMARY OF PUBLIC COMMENT

Inventory Phase

Most comments supported inclusion of the area for further study. A recheck of the area confirmed the comments.

Study Phase

All five letters received on WSA 235A favored wilderness designation for the area. Geologic, archaeologic, and biologic values were listed for this area. Specific flora and fauna such as cacti, creosote, Joshua trees, cholla, raptors, deer, red-tailed hawks, and other birds were mentioned. Primitive recreation such as hiking, camping, backpacking, photography, and nature study were all shown as desired. Two letters suggested forming one large Cima Dome Wilderness Area. Another felt grazing should be allowed in the area.

One comment was received in response to the workbook. It suggested eliminating this area from consideration because of the proximity of Interstate 15 and the paved Cima Road.

Draft Plan Alternatives

The following range of public comments specific to WSA 235A was received in response to the Draft Desert Plan Alternatives. Some wanted the remainder of the WSA also recommended as suitable for wilderness in the Protection Alternative. Another insisted that adjacent Wilderness Study Areas be combined with this study area as part of the Protection Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Shadow Valley Wilderness Study Area (235A) is recommended as nonsuitable for wilderness designation.

The area rated 112 in terms of its relative wilderness values and did not exhibit any qualities identified as desert-wide wilderness opportunities.

Although the competing resource values were considered to be low, it was decided that the highest and best use of the area would be achieved under a Class L designation.

This would provide access for grazing, mineral exploration and development, and general recreation. This classification would protect the two unusual plant assemblages, the rare plant, and the identified wildlife.

IMPACT OF PROPOSED PLAN

The WSA is recommended for Class L. Grazing is the most likely activity to occur in the WSA in the foreseeable future. Any reduction of wilderness values would be expected to occur at about the same rate as in the past, that is, very slowly.

WILDERNESS STUDY AREA 237

Magee/Atkins

GENERAL DESCRIPTION

Located five miles south of Interstate 15 at Valley Wells, the area (12,300 acres)[1] is bordered on the south by a combination of the road from Valley View Ranch east to the road junction at elevation 4,433 and the dirt road west from there to elevation 4,348 in Section 15, T. 14 N., R. 12 E. It is bordered on the west by a dirt road running north from Section 15 to elevation 3,908 in Section 16, T. 15 N., R. 12 E. It is bordered on the east by the road from Section 16 south to the Valley View Ranch.

The area contains 1-1/4 sections of non-public land comprising about 10 percent of the total land area. Portions of Section 4, 8, and 9, T. 14 N., R. 13 E., have been withdrawn from public entry for the protection of the recreation and public values thereon by Public Land Order 5224. This WSA contains 83 percent alluvial fans, 10 percent periments, 5 percent hills, and 2 percent dissected fans.

WILDERNESS QUALITY

Description of Environment

Topography consists of an undulating ground plane with three areas of uplifted hills. The area is the northwestern slope of Cima Dome and the bajada beyond it. Soil is light-colored and sandy. The three hills are about 200 feet higher than the surrounding bajada and are of dark gray and reddish rock. Vegetation is outstanding. Many species of cholla cactus are found here, along with creosote bush scrub and brittle bush. The most outstanding aspect of the vegetation is the thick growth of Joshua trees in the area.

Natural Condition

The area has been affected primarily by natural forces, with man's imprint substantially unnoticeable. A water tank adjacent to the southern border road and a primitive way in the north have an insignificant effect upon the naturalness of the area. The portion of non-public land in the extreme north has been excluded because of ranch complex developments.

[1]Portions of T. 14 N., 12 and 13 E.; and T.15 N., Rs. 12 and 13 E., SBM.

Outstanding Opportunities for Solitude or a Primtive and Unconfined Type of Recreation

Outstanding opportunities for solitude or a primitive type of recreation are found because of the rolling topography and thick growth of Joshua trees. Visitors are effectively screened from one another.

WILDERNESS STUDY AREA RANKING

This WSA ranked 109 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Engery-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for geothermal energy and cinders. No claims are recorded. Data are insufficient to interpret potential for other mineral resources.

Vegetation

This WSA contains a portion of the Shadow Valley-Cima Dome Joshua tree forest. Vegetation is comprised of creosote bush scrub, hopsage scrub, and big galleta scrub steppe. No rare species are known to exist in WSA 237.

Wildlife

Two BLM sensitive species occur in this WSA: the golden eagle and Swainson's hawk. The Swainson's hawk is nearly extirpated south of the Sixth Parallel. Other birds of interest include the gilded flicker and the Bendire's thrasher. Approximately 2 percent of the Bendire's thrasher range in the CDCA is present in this WSA.

Cima Dome, a unique geological structure, contains a large, dense stand of Joshua tree woodland which covers over 9 square miles. This represents approximately 25 percent of this entire Joshua tree forest.

Cultural Resources

It is suspected that prehistoric sites will be lightly dispersed in this area because of its proximity to the well-known archaeological site complexes to the west. Overall, prehistoric site density is probably fairly light (about

two sites per square mile average). Little systematic survey has occurred in this area. Therefore, the absence of areas of cultural resources sensitivity/significance is not surprising.

Native American Uses, Needs, and Sites

No known Native American resources have been documented within this wilderness area.

Scenic Quality

The study area has an over-all scenic quality rating of "high." Some of it covers a small part of the highly scenic Cima Dome polygon. Cima Dome received high scores for color, vegetation, and uniqu ss and a medium score for landform. The Dome itself is a unique scenic feature.

General Recreation

This WSA is part of a Natural Environment Area. No other recreation resources are known to exist in the WSA.

Range Uses and Potential

This WSA falls in the Valley View Allotment.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments received discussed natural values that supported inclusion of the area into the wilderness study phase. Field checks verified this opinion.

Study Phase

All but one of 42 letters received on WSA 237 favored wilderness designation for this area. Geologic, scenic, archaeologic, and biologic values were all discussed. The Joshua tree forest was often mentioned. Several mentioned the Cinder Cone area as a National Natural Landmark. Many letters urged continuance of grazing in the area. Primitive recreation was shown as desired. Quite a few letters suggested combining wilderness areas to make one large Cima Dome Wilderness Area. One letter urged acquisition of the Atken Cinder mine, while others felt rehabilitation of mining scars was possible.

The one letter opposing wilderness designation for the area was concerned about grazing being curtailed.

Comments were received in response to the workbook.

Draft Plan Alternatives

The following range of public comments specific to WSA 237 was received in response to the Draft Desert Plan Alternatives. Some wanted the remainder of the WSA also recommended as suitable for wilderness in the Protection Alternative. Another insisted that adjacent Wilderness Study Areas be combined with this study area as part of the Protection Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Magee/Atkins Wilderness Study Area (237) is recommended as nonsuitable for wilderness designation.

This area was rated low (109) in relative wilderness values, and it did not exhibit any qualities identified as desert-wide wilderness opportunities. The area displays potential for geothermal activity and cinders. It supports a portion of the Valley View grazing allotment and has been identified as a part of a natural environment area. It was determined that the mineral and range values exceeded the wilderness values and that the highest and best use of the area would be one that permitted access for mineral exploration and support of range facilities.

The area is recommended for Class L. This classification would protect those identified natural and cultural values.

IMPACT OF PROPOSED PLAN

The WSA is recommended for Class L. Grazing is currently the primary activity and has not degraded the wilderness values or scenic values which are associated with thick stands of Joshua Trees. If grazing continues at the same rate, significant impacts should not occur.

WILDERNESS STUDY AREA 237A

Deer Spring

General Description

This small, triangular-shaped area (2,720 acres)[1] is bordered on the north by a water tank maintenance road from elevation 4,433 in Section 13, T. 14 N., R. 12 E., east to the Valley View Ranch, on the southeast by the dirt road from Valley Ranch to Deer Spring, and on the southwest by the dirt road from Deer Spring to the water tank in Section 13, T. 14 N., R. 12 E., SBM. The area is entirely public land but contains less than 5,000 acres. A portion of Sections 8, 9, 17 and 20, T. 14 N., R. 13 E., has been withdrawn from public entry for the protection of the recreation and public values by Public Land Order 5224. This WSA is 75 percent alluvial fans and 25 percent pediments.

WILDERNESS QUALITY

Description of Environment

This area is part of the north slope of Cima Dome. It possesses dense stands of Joshua Trees and cholla cacti inherent to the Dome.

Natural Condition

This area is affected primarily by natural forces with man's imprint substantially unnoticeable. The Valley View Ranch complex in the extreme eastern corner has been excluded from the area containing wilderness characteristics. Because of the thick vegetation, the ranch buildings are well screened from the remainder of the area.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Outstanding opportunities for solitude or a primitive and unconfined type of recreation are readily available in this area because of screening from thick stands of vegetation.

Scenic Quality

The study area has a scenic quality rating of "high." It represents a very small portion of the highly scenic Cima Dome polygon, which received high

[1]Portions of T. 14 N., Rs. 12 and 13 E., SBM.

scores for color, vegetation, and uniqueness and a medium score for landform. The Dome represents a unique scenic feature.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 119 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for geothermal energy and uranium and thoruim. No claims are recorded. Data are insufficient to evaluate potential of other mineral resources.

Vegetation

This WSA contains a portion of the Shadow Valley-Cima Dome Joshua Tree forest. Other vegetation is comprised of creosote bush scrub, hopsage scrub, and big galleta scrub steppe. No rare species are known to exist in WSA 237A.

Wildlife

The area encompasses a portion of the north slope of Cima Dome, which is covered with an extensive, dense stand of Joshua tree woodland. Approximately 10 percent of this forest is present within WSA 237A. This area also has cholla cacti which, along with the Joshua tree woodland, provides a rich habitat for many species of birds and mammals. Especially significant birds found on Cima Dome include the gilded flicker, Bendire's thrasher, Swainson's hawk, and golden eagle.

Cultural Resources

It is suspected that site density in this area is slightly higher than other areas because of its proximity to Deer Spring. Three sites per square mile are estimated for this WSA.

Native American Uses, Needs, and Sites

No known Native American resources have been documented within this Wilderness Study Area.

General Recreation

This WSA is part of a Natural Environment Area and an Outstanding Natural Area. There is excellent hunting opportunity for deer and rabbits and excellent birdwatching throughout.

Range Uses and Potential

This WSA falls within the Valley View Allotment.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

No comments were received for this WSA.

Study Phase

No comments were received for this WSA.

No comments were received in response to the workbook.

Draft Plan Alternatives

The following range of public comments specific to WSA 237A was received in response to the Draft Desert Plan Alternatives. Some wanted the remainder of the WSA also recommended as suitable for wilderness in the Protection Alternative, while one insisted that adjacent Wilderness Study Areas be combined with this study area as part of the Protection Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED ACTION

The Deer Spring Wilderness Study Area (237A) is recommended as nonsuitable for wilderness designation.

This area was ranked 119 relative to the other study areas and did not exhibit any of the qualities identified as desert-wide wilderness opportunities.

The area displays possible potential for geothermal activity in addition to minerals. The area falls within a portion of the Valley View grazing allotment and has been identified as having excellent hunting and birdwatching opportunities.

It was decided that the mineral and range values exceeded the wilderness values and that the highest and best use of the area would be one that permitted access for mineral exploration and support of range facilities.

The area was recommended for Class L. The area has been previously identified as a part of a Natural Environment Area. This class will protect the known natural and cultural values.

IMPACT OF PROPOSED PLAN

The WSA is recommended for Class L. The area is generally flat, but the dense vegetation enhances the wilderness values. The principal activity in the past has been grazing. Little impact on wilderness values has occurred and little is expected to in the future.

The WSA is located on Cima Dome which has potential for geothermal. Should development occur, wilderness values would likely be lost because of the small size of the WSA and its lack of physical features.

WILDERNESS STUDY AREA 237B

Valley View

GENERAL DESCRIPTION

This triangular-shaped area (3,200 acres)[1] north of Cima Dome is bordered on the southwest by the dirt road running northwest from Valley View Ranch to elevation 4,176 in Section 30, T. 15 N., R. 13 E., on the north by a dirt road from Section 30 east to elevation 4,384 in Section 21, T. 15 N., R. 13 E., and on the east by a water tank maintenance road from Section 21 south to the Valley View Ranch. This small area is entirely public land. A portion of Sections 3 and 4, T. 14 N., R. 13 E., has been withdrawn from public entry for the protection of the recreation and public values by Public Land Order 5224. This WSA is entirely alluvial fans.

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. This WSA has potential for geothermal engergy in the western half. Data are insufficient to evaluate potential of other mineral resources.

WILDERNESS QUALITY

Description of Environment

This area is part of the north slope of Cima Dome. A wash crosses the northeast corner of the area. Vegetation includes cholla cacti, brittle bush, creosote bush scrub, and a dense growth of Joshua trees.

Natural Condition

The area is affected primarily by natural forces, with man's imprint substantially unnoticeable. Cattle grazing does exist within the area but has little effect upon the naturalness of the area.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Outstanding opportunies for solitude and a primitive and unconfined type of recreation exist in the area due to the lush vegetation and surrounding Wilderness Study Areas.

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[1]Portions of T. 14 N., R. 13 E.; and T.15 N., R. 13 E., SBM.

Scenic Quality

The study area falls within a scenic quality polygon with a rating of "high." The area received high scores for color, vegetation, and uniqueness and a medium score for landform. Cima Dome, of which this area is a part, is a unique scenic feature.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 124 out of 137 WSAs.

RESOURCES CONSIDERED

Vegetation

This WSA contains a portion of the Shadow Valley-Cima Dome Joshua tree forest. Vegetation is otherwise comprised of creosote bush scrub, hopsage scrub, and big galleta scrub steppe. No rare species are known to exist in this WSA.

Wildlife

This area is part of the north slope of Cima Dome. It possesses dense stands of Joshua trees and cholla cacti inherent to the dome. Approximately 6 percent of this Joshua tree woodland forest is present in WSA 237B. Wildlife values include golden eagle foraging habitat, gilded Flicker habitat, and Bendire's thrasher habitat over the entire area. Half of the area is Swainson's hawk habitat.

Cultural Resources

It is suspected that prehistoric sites will be lightly dispersed in this area because of its proximity to the well-known archaeological site complexes to the west. Overall, prehistoric site density is probably fairly light (about two sites per square mile average). Little systematic survey has occurred in this area. Therefore, the absence of areas of cultural resources sensitivity/significance is not surprising.

Native American Uses, Needs, and Sites

No known Native American resources have been documented within this wilderness area.

General Recreation

This WSA is part of a Natural Environment Area. No other recreation resources are known to exist in the WSA.

Range Uses and Potential

Parts of this WSA are in the Valley View and Kessler Springs Allotments.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

No comments were received on this WSA.

Study Phase

No comments were received on this WSA. No comments were received in response to the workbook.

Draft Plan Alternatives

The following range of public comments specific to WSA 237B was received in response to the Draft Desert Plan Alternatives. Some wanted the remainder of the WSA also recommended as suitable for wilderness in the Protection Alternative, while one insisted that adjacent Wilderness Study Areas be combined with this study area as part of the Protection Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Valley View Wilderness Study Area (237B) is recommended as nonsuitable for wilderness designation.

This area ranked very low in terms of relative wilderness values and did not exhibit the qualities identified as desert-wide wilderness opportunities. The area displays potential for geothermal activity. Parts of the WSA support both the Valley View and Kessler Springs grazing allotment. It was decided that the mineral and range values exceeded the wilderness values and that the highest and best use of the area would be one that permitted access for mineral exploration and support of range facilities.

The area is designated as Class L. The area is part of an area previously identified as a Natural Environmental Area. The area has both natural and cultural values that would be protected by this designation.

IMPACT OF PROPOSED PLAN

The WSA is recommended for Class L. Grazing is the principal activity at the present time and has been for many years. Wilderness values have not been lost and are not expected to be lost providing present activities continue at the present rate.

WILDERNESS STUDY AREA 238A

Teutonia Peak

GENERAL DESCRIPTION

The boundaries of this area (3,100 acres)[1] are roads that are maintained, used, and verified by the Valley View Ranch and the Kessler Springs Ranch. Approximately 2 to 4 percent of this area is non-public land concentrated in the northwest and southeastern portions of the study area. All but the non-public land in the northwest is embraced in a withdrawal which was placed on the land to protect the area from public entry and to protect the recreation and public values thereon by Public Land Order 5224. This WSA is 75 percent pediments and 25 percent hills.

WILDERNESS QUALITY

Description of Environment

This portion of Cima Dome includes Teutonia Peak (elevation 5,755 feet), which can be seen for many miles. Teutonia Peak is the only portion of Cima Dome that can provide excellent viewpoints of the Dome, the New York Mountains, Ivanpah Mountains, and other mountain ranges to the north and south. The general topography of this area is a portion of the rounded Dome itself. The soil type varies locally from sandy to rocky and is primarily light in color. Teutonia Peak is very rocky, contains several shades of grey, and sharply rises from the surrounding slopes of Cima Dome. The most outstanding feature of this area is the vegetation. Dense stands of large Joshua trees and an exceptionally thick undergrowth of cholla cactus abound within the area surrounding the peak. In addition, there are also a variety of associated shrub, annual forb, and native grass species scattered throughout this area.

Natural Condition

A small portion of this area has been slightly degraded. North of Teutonia Peak is the Teutonia mine, site of a few old buildings, several mine shafts, and numerous shallow prospect holes. Ranchers use the interior of the area for grazing purposes. But the over-all naturalness of the landscape is not impaired by this activity; the area retains its primeval character. The boundaries of the Wilderness Study Area are common with the roadless area boundaries with exception of the area east of Teutonia Peak. The boundary follows the ridgeline and excludes this portion.

[1]Portions of T. 14 N., R. 13 E., SBM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The thick Joshua tree forest and the gently sloping topography provide isolated spaces which provide seclusion for the visitor and offer outstanding opportunities for solitude. Though the area is relatively small, unconfined movement is available due to the lack of man-made intrusions.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 107 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for geothermal energy in the western quarter, uranium and thoruim in the eastern half, and lead-silver-fluorite in the northeastern portion. No claims are recorded.

Vegetation

This WSA contains a portion of the Shadow Valley-Cima Dome Joshua tree forest. Vegetation is otherwise comprised of creosote bush scrub, hopsage scrub, and big galleta scrub steppe. One rare plant, Bouteloua simplex, has been collected near Kessler Springs. It is not, however, particularly rare outside of California, and this probably represents its western limit. It occurs sporadically at best, has been found generally around roads and ways, and does not appear to be threatened by cattle grazing.

Wildlife

Wildlife known to be in the area include golden eagles (foraging habitat), swainson's hawks, gilded flickers, and Bendire's thrashers. Two springs provide water for wildlife in this relatively small WSA. An extensive and especially dense stand of Joshua tree woodland is present over the entire area. This represents approximately 7 percent of the entire habitat.

Cultural Resources

There are 1.5 square miles of high cultural resources sensitivity in the southeastern corner of this WSA. Site densities, mainly surface prehistoric,

probably average three sites per square mile in this eastern sector. Elsewhere, two sites per square mile is the likely density.

Native American Uses, Needs, and Sites

No Native American resources of significance are documented within this area. A reported Chamehuevi-Serrano boundary which runs through the southern half of the WSA may indicate this area was employed by both ethnic groups.

Scenic Quality

The study area has a scenic quality rating of "high." It encompasses a very small portion of the Cima Dome scenic quality polygon, which received high scores for color, vegetation, and uniqueness and a medium score for landform. The Dome itself is a unique scenic feature.

General Recreation

This WSA is on the northeastern flank of Cima Dome and includes Teutonia Peak. Cima Dome is rated as a high interpretive site and consists of the dome itself, an almost perfect, symetrically round granitic structure; a dense Joshua Tree forest which includes two other species of Yucca and at least five types of cactus; and the only site in California where Bendire's thrasher and the gilded flicker are known to breed. There is excellent hunting opportunity for both deer and rabbits. The WSA is within an Outstanding Natural Area. In some years there are good floral displays. There is excellent birdwatching throughout.

Range Uses and Potential

This WSA falls in small portions of the Valley View and Kessler Springs Allotments.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

A few comments detailed facilities east of Teutonia Peak. These were eliminated from the Wilderness Study Area. A large number of comments supported the findings.

Study Phase

Of 27 letters received on WSA 238A, 23 favored wilderness designation for mainly geologic, scenic, and vegetative reasons. The volcanic features of Cima Dome, the lava flows, and unique erosional features make this site a valuable geologic study area. The Joshua Tree forest was repeatedly discussed for its beauty, its size, and its ability to cover signs of man's presence. Protection of wildlife, specifically birds, was listed several times. Grazing was seen in many letters as workable within this Wilderness Study Area and therefore should be allowed. Boundary alternations were

suggested. One was to combine 237, 238A and 244 into one large area. One letter requested a land acquisition for Aiken Cinder mine. One commenter felt this geologic area needed protection from mining and other multiple-uses but that a wilderness classification was inappropriate. Primitive recreation opportunities such as hiking, backpacking, photography, horseback riding, and nature study were listed.

The letters opposing wilderness designation were concerned over grazing being disallowed under a wilderness classification and the existence of roads in the area. One letter suggested moving the eastern boundary of the WSA to either the western edge of Teutonia Ridge or the top of the ridge.

One comment was received in response to the workbook. This comment favored preserving the Mojave and Colorado Deserts as wilderness.

Draft Plan Alternatives

The following range of public comments specific to WSA 238A was received in response to the Draft Desert Plan Alternatives. Some wanted the remainder of the WSA also recommended as suitable for wilderness in the Protection Alternative, while one insisted that adjacent Wilderness Study Areas be combined with this study area as part of the Protection Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Teutonia Peak Wilderness Study Area (238A) is recommended as nonsuitable for wilderness designation.

This WSA was ranked low (107) relative to the other study areas and did not exhibit the qualities identified as desert-wide wilderness opportunities. The area has potential for geothermal energy, uranium, thorium, lead, silver, and fluorite. Portions of both the Valley View and Kessler grazing allotments are within the area, and it has been identified as providing excellent hunting opportunities. It was decided that the mineral and range values exceeded those of wilderness and that the highest and best use of the area would be one that permitted access for mineral exploration, support of grazing facilities, and motorized vehicle-oriented recreation.

The area is designated as Class L. Having been previously designated as an outstanding natural area, this classification would adequately protect the natural and cultural values.

IMPACT OF PROPOSED PLAN

The WSA is recommended for Class L. Man's primary historic use in the WSA has been grazing and some limited mining at Teutonia Mine. The dense vegetation has provided the screening to maintain the wilderness values although the mine facilities were not included in the WSA. Assuming that grazing will be the principal activity by man in the WSA and that this activity will continue at the same rate, the wilderness values should not be significantly impacted.

WILDERNESS STUDY AREA 238B

Cima Dome

GENERAL DESCRIPTION

This area (16,100 acres)[1] is a portion of the Cima Dome. The southern boundary of the Wilderness Study Area is the northern edge of the utility right of way which contains power transmission lines. This boundary is located along a line 400 feet north of the three existing transmission lines (except where a service road may extend outside the right of way). The area is bounded on the west by a maintained telephone line road, and on the north and east by ranch-related roads. About 5 percent of the area is non-public land. Portions of nine sections in the northeastern portion of the study area (and the southern portion of Cima Dome) have been withdrawn from public entry to protect the recreation and public values thereon by Public Land Order 5224. The records indicate there is at least one recorded mining claim in the southwestern portion of the study area. This WSA is 70 percent pediments, 28 percent alluvial fans, and 2 percent hills.

WILDERNESS QUALITY

Description of Environment

Cima Dome topography consists of the high, broad, rounded dome itself and two or three rocky ridges which rise abruptly from the surrounding slope. The Dome's slope gently rises from the bajada to the west where it attains a height of 5,701 feet. The vegetation is the most outstanding feature of the area: uniform in its distribution, and dominated by dense stands of Joshua trees, thick undergrowth of many varieties of cholla cactus, and associated shrubs and annuals.

Natural Condition

The east side of the area, near Cut Spring, has been eliminated from wilderness consideration because of the permanent structures and roads found in abundance. Cattle are presently being grazed on the land; however, because of the large size of the area, impact is minimal and does not detract from the naturalness of the land. The remainder of the area is affected primarily by natural forces and retains its undeveloped primeval character. The carrying capacity for visitors may be very large because of the screening factors.

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[1]Portions of T. 13 N., Rs. 12 and 13 E., T. 14 N., Rs. 12 and 13 E., SBM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Outstanding opportunities for solitude are offered in the area. The thickness of the Joshua tree "forest," along with the local topography, provide isolated, secluded spaces. These ensure outstanding opportunities for solitude. The gentle terrain and lack of structures provide outstanding opportunities for primitive and unconfined types of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 71 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurences are based on the BLM industrial mineral survey. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for geothermal energy and uramium and thorium. Two claims are recorded.

Vegetation

This WSA contains a portion of the Shadow Valley-Cima Dome Joshua tree forest. Vegetation is comprised of creosote bush scrub, hopsage scrub, and big galleta scrub steepe. One rare plant species is known to occur within the study area: Astragalus cimae var. cimae. There is no evidence that this plant is threatened by livestock grazing. Its restriction to calcium-rich soils is the principal factor affecting its distribution. Since the genus Astragalus is largely toxic and in general these plants are considered to be invaders and weedy pests of range lands, it is possible that A. cimae var. cimae is favored by grazing. Close monitoring of populations and an analysis of this species for toxins could shed light on its status.

Wildlife

Approximately 30 percent of the Joshua tree forest is located within WSA 238B. Wildlife of interest in this area includes the golden eagle (foraging area), Swainson's hawk, gilded thrasher, and Bendire's thrasher. Two springs provide excellent water sources.

Cultural Resources

Only one area of known cultural resources sensitivity is located within this WSA.

Native American Uses, Needs, and Sites

No Native American resources are documented within this area other than a Chemehuevi-Serrano boundary, which passes through the center of the WSA.

Scenic Quality

The study area has a scenic quality rating of "high." The major portion of the area falls within the Cima Dome polygon, which received a medium score for landform and high scores for color, vegetation, and uniqueness. The Dome is a unique scenic feature.

General Recreation

In some years there are good floral displays in the WSA. The WSA is within an Outstanding Natural Area and a Natural Environment Area. There is excellent hunting opportunity for dove, deer, and rabbits.

Range Uses and Potential

This WSA is in both Valley View and Kessler Springs Allotments. The Lava Beds Herd Management Area may extend into the WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

A large number of comments were received. All were in favor of including the area for further wilderness study and either recognized the unique geology, flora, and wilderness qualities or included comments regarding the study phase.

Study Phase

Of 24 letters received on WSA 238B, 18 favored wilderness designation. Unique geologic and vegetative features were often discussed. The large Joshua tree forest, jaegeriana, cactus, Cima rattlweed, and mat grama were listed. Protection of wildlife was also a concern, specifically the Bendire's thrasher and gilded flicker, which breed only in this area. Primitive recreation such as hiking, backpacking, photography, horseback riding, and nature study were shown desirable. One letter urged protection of geologic features from mining and multiple-use but not under a stringent wilderness classification.

The letters opposing wilderness designation dealt mainly with grazing and mineral concerns. Silver, lead, and zinc were specific minerals listed along

with geothermal potential. Sights and sounds felt to detract from the area's wilderness potential were: transmission line (influences 2 1/2-mile zone), roads, range facilities, and near-by towns. One letter urged continued use of ICMP management with use of existing vehicle routes.

Comments in response to the workbook were received.

Draft Plan Alternatives

The following range of public comments specific to WSA 238B was received in response to the Draft Desert Plan Alternative. Some wanted the remainder of the WSA also recommended as suitable for wilderness in the Protection Alternative, while one insisted that adjacent Wilderness Study Areas be combined with this study area as part of the Protection Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Cima Dome Wilderness Study Area (238B) is recommended as nonsuitable for wilderness designation.

The WSA was rated 71 relative to the other study areas and did not exhibit the qualities identified as desert-wide wilderness opportunities.

The area displays potential for geothermal activity and uranium and thorium. Parts of the WSA support both the Valley View and Kessler Springs grazing allotments and the site has been identified as an excellent hunting area.

It was decided that the mineral and range values exceeded the wilderness values and that the highest and best use of the area would be one that permitted access for mineral exploration, support of grazing facilities, and motorized vehicle oriented recreation.

The area is recommended for Class L. It has previously been identified as part of a national natural landmark and an outstanding natural area. This class will protect the natural and cultural resources within the WSA.

IMPACT OF PROPOSED PLAN

The WSA is recommended for Class L. Grazing is historically the principal use within the WSA. The dense vegetation, especially Joshua trees and cholla, is the most outstanding feature of this area. Grazing has had little impact on the wilderness values except where some improvements exist. These small areas were deleted from the Wilderness Study Area. It is expected that the grazing rate will continue at about the same rate and that impacts on wilderness values would occur at an increased rate.

WILDERNESS STUDY AREA 239

Cinder Cones

GENERAL DESCRIPTION

The area (47,250 acres)[1] is located south of Halloran Summit, which is on Interstate 15. It is bounded on the southeast by the Twistleman Pipeline Road, an improved dirt road used for grazing purposes and for access to the Aiken Cinder mine; on the west by the paved Kelbaker Road and a section of improved road leading south from I-15; on the north by an improved dirt road and a telephone line maintenance road; and on the east by a telephone line road.

The area consists almost entirely of public land. Non-public lands are widely scattered and account for approximately 5 percent of the total land area. A major portion of the center of the study area has been withdrawn from public entry to protect the recreation and public values by Public Land Order No. 5224. In addition, there are several recorded mining claims in the northwest and southeast of the study area. This WSA contains 35 percent hills, 30 percent alluvial fans, 20 percent pediments, and 15 percent lava flows. Most soils in this WSA are moderately sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

The diverse geologic composition of the area is evident in the variety of landforms. Topography ranges from flat valleys and sloping bajadas to rugged lava flows and steep cinder cones. Plant life in the area provides as much variety as the landform. Excellent stands of Joshua trees dominate much of the site. Cholla, barrel, and hedgehog cactus, as well as creosote, low desert shrubs, and grasses are plentiful. Numerous large washes traverse the area supporting riparian communities with plants such as desert willow.

Natural Condition

The area near the Cima mine in the eastern edge of the roadless area has been excluded from further wilderness consideration because of the impact of active cinder mining on the natural character of the area. To the southwest, extensive mining has taken place on many of the cinder cones concentrated there. Scars such as slag piles, deteriorating ways, and notches cut in the top of the cinder cones detract from the naturalness of the immediate area.

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[1]Portions of T. 13 N., Rs. 12, 13 and 14 E.; T. 14 N., Rs. 12, 13 and 14 E.; and T. 15 N., Rs. 13 and 14 E., SBM.

A road extending 1 mile toward Granite Spring and a road to Indian Spring have also been excluded. The remainder of the roadless area has been affected primarily by natural forces. Man's works, which include only a few primitive ways, are substantially unnoticeable because of topographic and vegetative variation. The area therefore retains its primeval character. The adjusted boundary diverges from the roadless area boundary on the south and east. To the south it follows the road to Indian Spring and then proceeds east to the roadless area boundary. On the east it follows the road to the Cima mine and then southward to the roadless area boundary.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

With the diverse terrain of this area (which includes cinder cones, sheer-faced lava flows, and bajadas), there are numerous secluded areas where opportunities for solitude are outstanding. Outstanding opportunities for a primitive and unconfined type of recreation are also provided within this area, which offers both challenge and diversity. The large concentration of cinder cones in the area, along with the abundance of other volcanically originated landforms, make this area geologically significant and fairly unique in the California desert.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 46 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has possible potential for geothermal energy, cinders, metals, uranium, and thorium. Four claims are recorded.

Vegetation

There are two unusual plant assemblages contained within this site: the Shadow Valley-Cima Dome Joshua tree forest and the spring and small riparian area at Indian Spring. General vegetational attributes include creosote bush scrub, blackbrush scrub, big galleta scrub-steppe, hopsage scrub, and some shadscale scrub. No rare, threatened, or endangered plants are known to occur within WSA 239.

Wildlife

This area contains several habitats of special significance, including Indian Spring (6 square miles, 90 percent of total area) and the lava beds cinder cone (67 square miles, 40 percent of entire area). Three springs located in the south-central portion of the WSA are also of special significance to wildlife. Indian Spring and the cinder cone area contain an abundance of wildlife species, including kit fox, bobcat, red-spotted toad, collared lizard, and chisel-toothed kangaroo rat. The presence of this last species represents a range extreme of a Great Basin desert species south into the Mojave Desert. The diversity and abundance of species in and around Indian Spring greatly exceed that of the surrounding creosote bush desert scrub.

Cultural Resources

Within this WSA are several areas of cultural resources sensitivity/ significance.

Native American Uses, Needs, and Sites

No Native American resources are documented within this area. A Chemehuevi-Serrano boundary runs through the southern part of the WSA, which may indicate this area was used by both groups. It is indicated that some temporary camps occupied by Chemehuevi exist in and around the Granite Spring and Indian Spring areas.

Scenic Quality

The area has an over-all scenic quality rating of "high." Consisting primarily of two scenic quality polygons, it is dominated by the Cinder Cones polygon, which received medium-range scores for landform, color, and vegetation and a high score for uniqueness. The cinder cones represent a unique scenic feature.

General Recreation

This WSA is part of a National Natural Landmark, an Outstanding Natural Area, and a National Environment Area. No other recreation resources are known to exist in the area.

Range Uses and Potential

This WSA is in the Valley View Allotment. The WSA also contains a portion of the Lava Beds Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Many comments were received. The vast majority supported the findings in the narrative. A few challenged the natural condition, saying many ways

detracted from the integrity of the landscape. No changes were made as a result of the comments because the issue raised had been previously known and considered.

Study Phase

Of the 27 letters received on WSA 239, 17 favored wilderness designation. Scenic and geologic features were often discussed by pro-wilderness letters. The National Natural Landmark of Cinder Cones and the black hills were repeatedly noted. A varied wildlife and vegetation (especially Joshua tree forest) were recommended for protection. Desirable primitive recreation included hiking and camping. Several boundary alterations were suggested. Several letters suggested a boundary extension to include the scenic black rock hills and the "Cima Cinders." One letter felt the road is not used so the boundary should extend to the telephone line paralleling I-15, which will then protect two local landmarks, Squaw Tit and Aiken's Wash. Another letter suggested combining WSAs 239, 240, and 244. It also proposed deletion of roads to Granite Spring and Indian Spring.

The letters opposing wilderness designation often spoke of sights and sounds felt to detract from the area's wilderness potential: roads, cones scarred with mining, a telephone cable road and repeater huts, grazing facilities, and motorized vehicle use. Grazing concerns were noted and geothermal potential discussed.

No comments were received in response to the workbook.

Draft Plan Alternatives

The following range of public comments specific to WSA 239 was received in response to the Draft Desert Plan. Some wanted the remainder of the WSA also recommended as suitable for wilderness in the Protection Alternative, while another insisted that adjacent Wilderness Study Areas be combined with this study area as part of the Protection Alternative. In addition, more nonmountainous acreage should be recommended as suitable for wilderness under the Balance Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The majority of the Cinder Cone Wilderness Study Area (239) is recommended as suitable for wilderness designation.

This WSA rated 46 relative to all areas under consideration. It includes a unique combination of landforms (lava flows and cinder cones) in a concentration unmatched within the CDCA. Although there are conflicts between potential mineral use and wilderness designation, it was determined that, in the interest of the desert-wide wilderness objectives, wilderness designation was the highest and best use of this unique area.

A portion in the south has been recommended for Class L designation and another in the east for Class M designation. These designations are

recommended to permit increased access for mineral exploration and recreation.

IMPACT OF PROPOSED PLAN

All wilderness values will be adequately protected in those portions of the WSA designated as Class C. Expanded mineral exploration and development and grazing may adversely affect the naturalness of that portion of the area designated Class M. The remainder of the WSA is Class L. The Class L designation is based on allowances for grazing improvements. Grazing has been conducted in the past with little effect on the wilderness values. If maintained at the same level, the impacts would not be significant. Increases in the level of use and number of range improvements, could, if not controlled, impact the wilderness quality.

WILDERNESS STUDY AREA 242

Soda Mountains

GENERAL DESCRIPTION

The area (112,250 acres)[1] is located west of the town of Baker. The northern boundary of the Wilderness Study Area is the southern edge of the utility right of way which contains power transmission lines. This boundary is located along a line 400 feet south of the three existing transmission lines (except where a service road may extend outside the right-of-way). The eastern boundary is State Route 127, between the town of Baker and the powerlines. The southern boundary is split into two sections: (1) from the town of Baker to the East Cronese Lake, the southern boundary is a powerline road right of way; (2) from the lake to the western boundary, the southern boundary is Interstate 15. The western boundary is an improved Pacific Telephone and Telegraph line road between Interstate 15 and the powerline road to the north.

The area includes approximately 20 sections of non-public land scattered throughout. These account for approximately 5 percent of the total land area. There are several recorded mining claims in the north, east, and by the location of several recorded mining claims in the north, east, and southwest portions of the study area. This WSA contains 35 percent mountains, 30 percent alluvial fans, 10 percent hills, 10 percent playas, 5 percent sand-covered fans, 5 percent dissected fans, 3 percent sand-covered plains, 1 percent highly dissected fans, and 1 percent sand-covered dissected fans.

WILDERNESS QUALITY

Description of Environment

The topography of this area varies from gently sloping bajadas to the rugged Soda Mountains. This highly eroded mountain range has jagged ridges and sharp peaks. The associated washes have steep, rocky walls that vary in color from brown at the base to red in the middle and gold at the top. Within the range are large interior valleys caused by erosion. The bajadas are interlaced with washes and slope away from the mountains toward the boundaries. The vegetation of this area is found mostly at the base of the mountains, in the interior valleys, and in the bajadas. The dominant vegetation is sparse stands of creosote. Intermixed with the creosote are small annual plants and occasional barrel cactus, cholla, and yucca.

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[1]Portions of T. 11 N., R. 5 E.; T. 12 N., Rs. 5, 6 and 7 E.; T. 13 N., Rs. 5, 6, 7 and 8 E.; T. 14 N., Rs. 6, 7 and 8 E.; and T. 15 N., Rs. 7 and 8 E., SBM.

Natural Condition

Portions of this area have been affected by man. Some activity, both past and present, has resulted in a degradation of the natural environment and in exclusion of these sites from those containing wilderness values. A telephone relay station and access road to the Southern Soda Mountains near Interstate 15 at the Beacon overpass has been included. In addition, the active Blue Bell mine in the Soda Mountains was excluded because of current operations (bulldozing, slag piles, shafts, equipment). Along the western border two active quarries, one mine, borrow pit, and their associated roads and ways have been excluded, in portions of Sections 21, 22, 26, 28 and 34, and all of Section 27. Another borrow pit and road, off Highway 91, have been excluded in Section 33 (T. 12 N., R. 6 E.). In the northern portion of the area having 2(c) values, signs of man's works are included. From the northern border in Section 25 (T. 15 N., R. 7 E.), this road runs south through Sections 25 and 36 (T. 15 N., R. 7 E.) and Sections 1, 2, 11, 14, and 15 (T. 14 N., R. 7 E). Nearby, another mining road is also excluded because of its maintenance and associated mining scraps. The southeast corner, near Baker, has been excluded because of several ways, old mining scars, and motorized vehicle tracks.

The remainder of the area has been affected primarily by natural forces with man's imprint substantially unnoticeable. A way crosses the valley between the Cronese and Soda Mountains. Sections of this way are under water at East Cronese Lake. Several other old ways are in the area but have an insignificant effect upon the naturalness of the area.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Opportunities for both solitude and for a primitive and unconfined type of recreation are outstanding in the area. The large size and variation in landform provide numerous opportunities.

WILDERNESS STUDY AREA RANKING

This WSA ranked 67 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has past production and possible potential for metals (copper, lead, silver, iron, molyldenum, zinc), uranium, and industrial minerals (silica, limestone, talc) in the Soda and Cronese Mountains. Possible potential for sodium, potassium, oil, gas, and clay may exist in Silver and Cronese Lakes. There are 55 recorded claims in the Soda Mountains and 36 in the Cronese Mountains.

Vegetation

No unusual plant assemblages occur within WSA 242. Vegetation within the WSA consists mostly of creosote, bush scrub, allscale scrub, mesquite thicket, and psammophyte (sand dune) plant communities. One sensitive species (Castela emoryi) occurs within WSA 242. This plant, however, is not considered rare outside California.

Wildlife

In the western portion of the area are two intermittent lakes, East Cronese and West Cronese Lakes. East Cronese often contains water. It provides habitat for wintering and migrating waterfowl and shorebirds. The Yuma clapper rail, a federally listed endangered species, has been observed here also. The concentrations of water-related birds also make this a choice foraging area for raptors. This area also contains 65 square miles of desert bighorn sheep transient range, representing approximately 95 percent of the bighorn sheep range used on an intermittent basis in the Soda Mountains.

Cultural Resources

A number of known sensitive/significant areas are located in this proposed WSA.

Native American Uses, Needs, and Sites

This WSA contains salt and hunting-camp localities employed by Chemehuevi. They are located primarily in the central section of the wilderness area. Temporary campsites and a system of aboriginal trails connect this region to primary traditional occupation areas along the Colorado River.

Scenic Quality

The study area, which includes portions of eight scenic quality polygons, has an overall scenic quality rating of low. The Soda Mountains, which dominate the scenery in the area, received low scores for landform, vegetation, and uniqueness and a medium score for color. Cronese Dry Lake added some diversity to the scenery.

General Recreation

There are four interpretive sites in the WSA. Silver Lake, evaluated as medium, is part of a string of dry lakes that were connected by the Mojave River during the Pleistocene: Cronese Valley, rated as medium, has

biological, geological, and archaeological themes. Cat Mountain, rated as low, is a geological formation that looks like a sitting cat and is composed of dark rock partially buried by stabilized drift sand.

There is one teaching and research site receiving at most four visits annually from pre-college and university students.

The eastern edge of the WSA includes a fraction of the concentrated use zone along Highway 127. This receives 8,834 annual visitor use days with such uses as motorized vehicle touring and nature-oriented activities. Along the southern boundary the WSA contacts a part of the concentrated use zone in the Cronese Valley. This zone has 5,728 annual visitor use days which include such uses as motorized vehicle touring and play.

Range Uses and Potential

The Cronese Lake Allotment is within the WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

The majority of the comments agreed with the findings. Several comments suggested the southeast border be extended south. A few comments dealt with additional roads. After field checks, the appropriate changes were made.

Study Phase

Comments addressing study questions were divided about equally between those supporting and those opposing further study of WSA 242 as wilderness. There are negative effects on wilderness qualities from the Union Pacific Railroad, powerlines, roads, Fort Irwin aircraft and artillery, and Baker and Las Vegas city lights, according to some comments. The Agamine ways and roads in the valley west of the Soda Mountains were mentioned as intrusions. One felt the area had some slightly interesting geology, but it was found in many other areas of the desert. Oil, gas, and geothermal resources may be present in the southwest third of the area and access for exploration is needed. Saline minerals, especially borate, gold, copper, and silver are mentioned. Rockhounds enjoy the area and want it left open; access from I-15 at the Afton Canyon off-ramp to East Cronese Lakes, Blue Bird mine, and Baker was mentioned. Hunting, grazing, and motorized vehicle use are recommended. A Boeing Coal Slurry transportation system may use I-15 or the Boulder utility corridor as a route, and officials requested flexible study area boundaries to accommodate this project. Other comments include: Cronese Lake is a man-made diversion for Mojave River flood control and therefore not a natural feature to be protected; the wilderness inventory area is less than 5,000 acres of Federal land, the minimum dictated by FLPMA (Section 603).

Wilderness study designation supporters note archaeological, botanical, geological, and recreational values. The area, to some, is "scenic and mysterious." Its washes invite exploration, camping, photography, scientific

study, and easy hiking. Silver Dry Lake should be included as the best example of a playa for representation in the wilderness system. An old, very tall crucifixion thorn stand needs protection. A huge archaeological site exists on the west side of West Cronese Lake; further impacts from vehicles would destroy it. The damage caused by the Barstow to Las Vegas motorcycle race through this area was discussed. The reasons for the two small exclusions in the area were unclearly expressed in the wilderness inventory narratives, one commented.

Comments were received in response to the workbook. These responses contained general comments pertaining to multiple-use. One response favored a need for access roads for enjoyment of wilderness. Another response favored a border adjustment to enhance wilderness.

Draft Plan Alternatives

The following range of public comments specific to WSA 242 was received in response to the Draft Desert Plan. For example, one was in agreement with the Balanced Alternative, another called for the Balanced Alternative recommending the entire study area as suitable for wilderness, while a third insisted on recommending a greater acreage of nonmountainous terrain as suitable for wilderness under the Balanced Alternative. A need for continued use of existing vehicle routes within wilderness was expressed. In addition, one stated that the exploration and development of oil, gas, and geothermal resources under the No Action Alternative were the best uses for the study area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Soda Mountains Wilderness Study Area (242) is recommended as nonsuitable for wilderness designation.

Although wilderness values in the area were recognized, it was recommended for Class L designation. The site rated in the middle (67) of all the areas studied. It was decided that the Wilderness Study Area's value for potential mineral development and general recreation exceeded that of wilderness. The area did not meet any of the desert-wide wilderness objectives.

The area includes a large number of culturally sensitive areas and sites of Native American significance. Included within its boundaries are 65 square miles of bighorn sheep habitat, and the two Cronese Lakes support both wintering and migrating birds. The Class L designation would protect these valuable natural and cultural resources while permitting a broad variety of uses.

IMPACT OF PROPOSED PLAN

The entire WSA is recommended for Class L with the exception of the Soda Mountains. The terrain in the area is generally a low, flat, rolling bajada. Mineral development, range improvements, and motorized vehicle use on

designated routes would impact all existing values. Impacts would be less severe in the mountainous areas where they could be localized by terrain.

WILDERNESS STUDY AREA 243

Old Dad Mountain

GENERAL DESCRIPTION

The northern boundary of this area (58,000 acres)[1] includes an underground telephone line right of way, a cattle fence maintenance road south of Rattlesnake and Big Cowhole Mountains and a cattle fence maintenance road that eventually ties into the telephone line road near 17-Mile Point on Kelbaker Road. The eastern boundary includes Kelbaker Road. The southern boundary of the Wilderness Study Area is the northern edge of the utility right of way which contains power transmission lines. This boundary is located along a line 400 feet north of the three existing transmission lines (except where a service road may extend outside the right of way), the railroad line and maintenance road, and the western boundary, Basin Road. Approximately 10 to 15 percent of this area is non-public land scattered throughout the area. There are recorded mining claims in the northeastern and southeastern portions of the area. This WSA contains 40 percent sand dunes, 20 percent hills, 15 percent sand-covered fans, 10 percent sand-covered plains, 5 percent highly dissected fans, 5 percent dissected fans, 3 percent alluvial fans, and 2 percent sand-covered dissected fans.

WILDERNESS QUALITY

Description of Environment

This area contains a variety of vegetation types, geographical features, and landforms. Of particular significance is the Mojave River Sink, occupying the southern portion of the area, which grades from flat, rocky terrain on the west to mesquite-covered sand hummocks and small dunes in the central portion. Other significant landforms include the flat, alkali-covered Soda Lake Bed; the low, sand-blanketed hills of Devil's Playground; the large steep-sided Old Dad Mountain; and the smaller, but rugged, Soda Mountains and Cowhole Mountains. Except for the sand hummock area, which supports a rich community of mesquite and other sand-tolerant plants, vegetation throughout the area is sparse, consisting mostly of creosote and mixed shrubs. A major portion of Soda Lake Bed is entirely devoid of vegetation because of the mineral content in the soil.

Natural Condition

A major portion of the area generally appears to have been affected primarily by natural forces, with man's imprint substantially unnoticeable. Boundary

[1]Portions of T. 11 N., Rs. 8, 9, and 10 E., T. 12 N., Rs. 9, 10, and 11 E.; and T. 13 N., Rs. 9, 10, and 11 E., SBM.

adjustments have been made to exclude heavily impacted areas, such as the area just east of Afton Canyon, which contains numerous ways and surface scrapings and which appears to have been used as a dumpsite for scrap metal; the Rasor Ranch/Crucero area which contains numerous ways, motorized vehicle impacts, and the abandoned Rasor Ranch structures; the road to private dwellings from the Ransor Ranch exit on Interstate 15; the improved roads, buildings, and other developments in and around Soda Springs; the roads to active mines (surface scraping, structures, and slag piles) in the Cowhole and Little Cowhole Mountains; and the roads, slag piles, tunnels, and shafts near 17-Mile Point. A previously graded road leads along the western edge of Old Dad Mountain to a mine (grading on slopes) on the northern edge. An unimproved way continues north from this road along the western edge of the mountains and ties into the road going east from the Little Cowhole Mountains. The way has little impact on the naturalness of the area because of its deteriorated condition.

The adjusted boundary proceeds northeast following a wash from the Union Pacific Railroad at Section 12 (T. 11 N., R. 9 E.) to the edge of the dry lake. It then follows the edge of the dry lake and skirts around the southern edge of the Cowhole Mountains, then northward to the roadless area boundary at Section 30 (T. 13 N., R. 10 E.). Except for the exclusion of the mines near 17-Mile POint; the boundary generally follows the roadless area boundary from this point on.

Within the adjusted boundaries, the land has generally retained its primeval character and influence. Other works of man, which include a few primitive ways, are substantially unnoticeable because of terrain variety and the sandy nature of some areas.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The area contains a varied topography which provides outstanding opportunities for solitude within the secluded canyons of the mountains and in the vast, open plains. Unobstructed views in many directions enhance feelings of remoteness in the area. The diversity of geological features also provides outstanding opportunities for a wide range of primitive and unconfined types of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 91 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include

all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

There are reported occurrences of lead, silver, zinc, gold, limestone, and uranium. Most of these occurrences were reported by the Terradata study. There is potential for these commodities plus potassium, sodium, geothermal energy, oil, and gas. Three claims are shown on the BLM computer printout of claims on December 12, 1979.

Vegetation

No unusual plant assemblages occur within WSA 243. Vegetation consists mostly of creosote bush scrub, allscale scrub, mesquite thickets, and the psammophyte assemblage of the Devil's Playground area. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

Old Dad Mountain provides permanent habitat for a desert bighorn sheep herd of about 60 individuals, which is declining. This represents approximately 25 percent of the total range used by this herd. It includes 90 percent of the bighorn sheep permanent range and 15 percent of the bighorn sheep seasonal range present here.

Most of the area is included in the foraging areas of golden eagles and prairie falcons. A small portion of the area supports low tortoise populations, estimated at densities of 20 to 50 per square mile. Tortoise populations are located within the Kelso Desert Tortoise Area, a recognized high density area for this species in California. Approximately 4 square miles of desert tortoise range, covering 5 percent of the Kelso Desert Tortoise Area, are located in WSA 243.

Cultural Resources

Approximately 9 square miles of high sensitivity/significance are located in the WSA.

Native American Uses, Needs, and Sites

This WSA contains areas identified in Native American myths. The Old Dad Mountains are mentioned in both Mojave and Chemehuevi myth. Several Native American trails are documented in this area. Specifically, one leads from the Old Dad Mountains to the Mesquite Dunes in the eastern part of the WSA. Another follows a line adjacent to the western WSA border. These trails presumably have been used by Chemehuevi and Panamint Shoshone for purposes of hunting. A Chemehuevi salt and general collection area overlaps the upper northwestern area of the WSA. A Chemehuevi bighorn sheep hunting area occupies the extreme eastern part of the WSA. There is also a Chemehuevi-Serrano boundary following in a southwest to northeast direction through the WSA.

Scenic Quality

The study area has a scenic quality rating of "medium." It consists primarily of two scenic quality polygons. The Kelso Mountains polygon received medium scores for all key factors. The Devil's Playground polygon received high scores for color and uniqueness, a medium score for landform, and a low score for vegetation.

General Recreation

There are three interpretive sites in the WSA. The Old Dad/Playground faults, rated low, offer good examples of two different kinds of faults; the Old Dad fault is a good example of a reverse, high angle fault, while the Playground Fault is a good example of thrust faulting. Old Dad Mountain, unevaluated, is of volcanic origin. Devil's Playground, unevaluated, is an extension of the Mojave-River sink with lots of wind-blown sand and very little vegetation. There is one teaching and research site receiving at least one visit annually from a college or university.

Range Uses and Potential

This WSA falls in portions of the Granite Mountains and the Valley View Allotments. A portion of the WSA extends into the Lava Beds Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Public comment was overwhelmingly in favor of this area's inclusion as a study area. Many comments urged the addition of the Mojave River Sink on the basis of its ecological significance and apparent naturalness. A few comments opposed the addition of the Sink area because of its popularity for motorized vehicle and camping use in the Rasor Ranch/Crucero area. Field examination revealed the impacts which impaired the natural condition.

Study Phase

A majority of comments discussing WSA 243 approved of wilderness study designation. Many of the comments favoring wilderness designation also urged the inclusion of the western area of WSA 243 for wilderness study, describing its insignificant motorized vehicle use, the Afton Canyon oasis, the panoramic views of the East Mojave, Soda Lake, lush stands of riparian vegetation, and the "spectacular and unique" Mojave River Sink and related wildlife. A few thought the western area's exclusion was a precommitment to motorized vehicle use of the BLM. Features of WSA 243 which merited wilderness study designation include scenically interesting dunes, unique combinations of alkaline flats and sand dunes; archaeological values; historic values, including the remnants of the Tonopah and Tidewater Railroad, and the Old Government Road; excellent hiking and riding; wildlife, including roadrunners, soras, phainopeplas, Lincoln's sparrows, long-billed

marsh wrens, yellow-headed blackbirds, and other birds that gather at a freshwater marsh in the desert; and several opportunities for recreation and education. One suggestion was to combine WSAs 243, 249, and 250 to create a "Devil's Playground Wilderness Area," which would include the Mojave River Sink and Kelso Peak.

Several supported multiple-use designation of the area, and mentioned that the sand dunes provide an excellent and outstanding motorized vehicle free play area. Camping, four-wheel driving, hunting motorcycling, trailriding, picnicking, prospecting, and rockhounding were among other activities mentioned. The abandoned railroad route of the Tonapah and Tidewater is now a motorized vehicle road, and the area receives 2,000 to 3,000 visitors on a Thanksgiving weekend, according to one comment. The Rasor Ranch exit on I-15 provides access to the area for many, including jeep clubs. This area is also, according to another, the finest rockhounding area in the U.S.A, along with WSAs 251, 252, and 244. Mineralization is present; lead, silver, gold, and iron were mentioned. The western half also has geothermal, oil, and gas potential. The area contains 1,947 acres leased for grazing. Some feel that the railroad, transmission line, and adjoining roads provide sight-and-sound intrusions which nullify wilderness qualities. One comment suggested that BLM was trying to complement its takeover of the ZZYXX Ranch by taking the area away from the public and using it for "selfish" university study.

One comment was received in response to the workbook. This response from the San Diego Mining and Gem Society, stated that road access helps rockhounds get into the area.

Draft Plan Alternatives

The following range of public comments specific to WSA 243 was received in response to the Draft Desert Plan Alternatives. One agreed with the Protection Alternative, another favored the Balanced Alternative, while a third insisted that a greater acreage (e.g., Soda Lake, Devil's Playground, the entire study area, and more nonmountainous terrain) be recommended as suitable for wilderness. In addition, one stated that the exploration and development of oil, gas, and geothermal resources under the No Action Alternative were the best uses for the study area.

IMPACT OF PROPOSED PLAN

The majority of the WSA is recommended for Class L. The area has a history of grazing. Continued at the existing level, there would be no significant impacts. The extreme southwestern tip of the WSA is recommended for Class I. Designation of the site as an open area would significantly impact all wilderness values.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Old Dad Mountain Wilderness Study Area (243) is recommended as nonsuitable for wilderness designation.

Located within the boundaries of this area are large, known reserves of iron ore, and the area displays potential for other mineralizations. The potential for oil, gas, and geothermal resources exists. The area also supports two grazing allotments and a variety of recreation activities. The study area fell into the bottom half of all WSAs and did not exhibit the qualities identified as desert-wide wilderness opportunities. It was decided that the mineral and recreation resource values were greater than the wilderness values.

In order to protect the natural and cultural values which include a bighorn sheep herd of approximately 60 individuals, 9 square miles of culturally sensitive areas, plus the areas of Native American concern, the majority of the WSA is recommended for Class L. A small area in the southwestern corner of the WSA is recommended for Class I, to accommodate motorized vehicle oriented recreation.

WILDERNESS STUDY AREA 244

Rainbow Wells

GENERAL DESCRIPTION

The southern boundary of the Wilderness Study Area (17,800 acres)[1] is the northern edge of the utility right of way which contains power transmission lines. This boundary is located along a line 400 feet north of the three existing transmission lines (except where a service road may extend outside the right of way). On the east, the area is bounded by a maintained road used for access to Rainbow Wells and for service to a utility line, and on the northwest, by a road used for access to the Aiken cinder mine, as well as a maintenance road for adjoining cattle tanks and water line. The area contains two sections of non-public land, which account roughly for 10 percent of the total land area. There are a number of recorded mining claims in the northern and eastern portions of the study area. This WSA contains 40 percent pediments, 30 percent plateaus, 20 percent alluvial fans, 8 percent hills, and 2 percent dissected fans.

WILDERNESS QUALITY

Description of Environment

This area contains about half of the area known as the "Cinder Cones." Topography varies throughout the area. The Cones rise above the surrounding terrain about 300 feet; they are dark red and black and symmetrically shaped. Between the Cones are large, white, sandy washes and bajadas and extensive black lava flows of rough extrusive rock. Vegetation in the area varies with the substrate. The washes and bajadas support creosote bush scrub, which grows rather widely spaced across the area, as well as some desert willow. Cholla cacti and Joshua trees are also found in these areas. The Cones and lava flows support little vegetation and are in direct contrast with surrounding washes and bajadas.

Natural Condition

One portion of this area has been excluded from further wilderness consideration because of the impact on its natural character created by the Aiken Cinder mine. The mine lies on the northeastern side of one of the Cones in the northeastern portion of the roadless area. The operation is extensive and uses heavy machinery, creating large gashes and slag piles. Only the immediate vicinity of the mine is impacted. The remainder of the Cone and other nearby Cones, screen out all influence to the west of the mining operation. The remainder of the roadless area retains its primeval

[1]Portions of T. 12 N., Rs. 13 and 14 E.; and T. 13 N., Rs. 13 and 14 E., SBM.

character. Man's works, which include a few primitive ways, are substantially unnoticeable due to screening by terrain and vegetation.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Terrain diversity and vegetative variety allow for outstanding opportunities for solitude by providing areas of seclusion. The area also offers challenge, as well as a unique recreation experience, among the Cinder Cones and other volcanic features, making opportunities for a primitive and unconfined type of recreation outstanding.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 104 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for geothermal energy and metals. Eight claims are recorded. Cinder is produced from the northern part of the area.

Vegetation

No unusual plant assemblages occur within WSA 244. Vegetation consists mostly of creosote bush scrub with Joshua tree and Mojave yucca. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

This WSA has approximately 4 square miles of desert tortoise populations at densities of 20 to 50 per square mile. This represents roughly 2 percent of the Kelso Desert Tortoise Area, a recognized area containing relatively high densities of this species. Twenty-five square miles of this WSA is within the range of the Bendire's thrasher. This represents approximately 3 percent of the range of this species in the CDCA. Three square miles of golden eagle foraging area and 3 square miles of Swainson's hawk range are also present here.

Cultural Resources

Approximately 16 square miles of high sensitivity/significance are located in the WSA.

Native American Uses, Needs, and Sites

Few resources of Native American value are documented within this wilderness area. A Chemehuevi mountain sheep hunting zone overlaps the southern section of the WSA.

Scenic Quality

This study area has an over-all scenic quality rating of "medium." It encompasses portions of two scenic quality polygons. The Cinder Cones polygon received medium scores for landform, color, and vegetation; the Kelso Mountains portion also received medium ratings for all key factors. The Cinder Cones are a unique scenic feature.

General Recreation

This WSA is part of a National Natural Landmark, Outstanding Natural Area, and a Natural Environment Area. There is good hunting opportunity for dove, quail, and deer in about 5 percent of the WSA. No other recreation resources are known to exist in this WSA.

Range Uses and Potential

This WSA falls into the Valley View and the Kessler Springs Allotments. Burros from the Lava Beds Herd Management Areas and Marl Springs are found in the WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

The majority of comments received supported the findings.

Study Phase

A heavy majority of the letters and comments on WSA 244 favored its designation as a Wilderness Study Area. Some mentioned the designation of surrounding areas as completing the integrity of the area, especially WSAs 237, 238A, 239, and 240. The unique granite bubble of the dome, extensive grasslands relatively unique to the desert, stark scenic contrast of white sand and black lava, "outdoor classroom study opportunities for geologists and naturalists," productive wildlife habitat, washes, a lush Joshua tree forest, archaeological values, habitat for the rare Cima rattleweed, and hiking, photography, and camping opportunities make this area high-priority wilderness for several commenters. A few felt that further protection as a National Natural Landmark was needed. Supporters of wilderness who mentioned

grazing felt grazing should be accommodated in the area. Six hundred forty acres of the area are leased for grazing.

The entire WSA has oil, gas, and geothermal energy potential, which would require a multiple-use designation to allow exploration. Adjoining transmission lines exert a negative effect on wilderness qualities, as do mines and roads visible from within the area. A boundary adjustment of 1-1/2 miles, at the least, is recommended to remove the visibility of these features from the area.

No comments were received in response to the workbook.

Draft Plan Alternatives

One public comment, recommending a greater acreage as suitable for wilderness than in the Protection Alternative, was received in response to the Draft Desert Plan Alternatives.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Rainbow Wells Wilderness Study Area (244) is recommended as nonsuitable for wilderness designation.

This WSA was ranked 104 in terms of its relative wilderness qualities and did not exhibit any qualities identified as desert-wide wilderness opportunities. The area displays potential for geothermal energy and metals. Two grazing allotments are supported within the WSA, and the area has been identified as having good hunting opportunities. Although the competing resource values were considered to be low, it was decided that they exceeded the value of the wilderness resource and that the highest and best use of the area would be one that allowed access for mineral exploration, motorized vehicle recreation, and grazing facilities.

Since the area had previously been identified as part of a National Natural Landmark and an Outstanding Natural Area, the WSA was recommended for Class L. This class will protect the natural and cultural values while permitting access.

IMPACT OF PROPOSED PLAN

The majority of the WSA is recommended for Class L with a small portion in the extreme northern part as Class M. Activities permitted under these designations would, without mitigation, result in local impacts. Mining on the scale of the Aiken Cinder Mine and range improvements would significantly impact wilderness values. ORV use on designated routes would affect the naturalness of the area.

WILDERNESS STUDY AREA 245

Eight-Mile Tank

GENERAL DESCRIPTION

The area (20,600 acres)[1] is bordered on the west by a utility line road, on the south by a gas pipeline-telephone road, on the east by Kelso-Cima Road, and on the north by the southern edge of the utility right of way which contains power transmission lines. This boundary is located along a line 400 feet south of the three existing transmission lines (except where a service road may extend outside the right of way). Two or three sections within the area are non-public lands. Records indicate there are several recorded mining claims in the eastern portion of the area. This WSA contains 80 percent alluvial fans, 10 percent hils, and 10 percent pediments.

WILDERNESS QUALITY

Description of Environment

The majority of the area consists of flat, gently sloping bajadas. A second feature is a small uplift of mountains at the western end of the area. These hills rise rather abruptly from the surrounding plain. Vegetation of the area is mostly creosote bush scrub flats with yuccas and cholla cacti. Joshua trees are abundant but not dense at the higher elevations.

Natural Condition

The area is primitive and undeveloped except for a road penetrating from the east to a stock tank. The immediate area of both permanent improvements have been excluded from further wilderness consideration. A way, called "The Old Government Road," bisects the area from east to west and is visible from higher elevations. It is of historical significance and has not been excluded. An abandoned mine with associated way is present in the area, but the mountainous topography serves to screen the mine. The remainder of the area is affected primarily by the forces of nature and is free of man's influence.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The area is relatively unconfined in nature and is of a size and conformity that offers outstanding opportunities for solitude and for a primitive and unconfined type of recreation. Its location adjacent to another area with

[1]Portions of T. 12 N., R. 13 E. and T. 13 N., R. 13 and 14 E., SBM.

wilderness characteristics (Cima Dome) enhances opportunities for solitude and primitive recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 98 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

Data are insufficient to evaluate resource potential of this WSA. Four claims are recorded.

Vegetation

Cima Dome Joshua Tree Forest occurs within WSA 245.

Wildlife

Key wildlife values include 27 square miles of Swainson's hawk habitat, 9 square miles of gilded flicker habitat, 13 square miles of desert tortoise habitat with tortoise densities of 20 to 50 per square mile, and 4 square miles of habitat with tortoise densities of 50 to 100 per square mile. Additionally, there are 5 square miles of the Cima Dome unique habitat area. The WSA contains two springs with considerable wildlife value.

Cultural Resources

Approximately 8 square miles of high sensitivity/significance are located through the center of the area. Cultural resources include the Old Government Road.

Native American Uses, Needs, and Sites

This area has been traditionally occupied and exploited principally by Chemehuevi/Southern Ute. The region is tied to the Colorado River and Death Valley areas by a system of aboriginal trails. Few specific Native American values have been identified within the WSA.

Scenic Quality

This study area, which includes portions of three scenic quality polygons, has a "medium" scenic quality rating. It is located on the southern edge of Cima Dome, which is a unique scenic feature. Scenic views to the Kelso Dunes and Providence Mountains enhance the scenery in this study area.

General Recreation

This WSA is part of a National Natural Environment Area. There are no other known recreation resources.

Range Uses and Potential

This WSA is in the Kessler Springs allotment. It also contains a portion of the Marl Springs Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

The majority of comments which related to the inventory supported the findings.

Study Phase

About a dozen comments were received for this area; wilderness study designation was favored by a slight majority. The area was thought to be a good complement to a greater "Cima Dome Wilderness Area." Lofty plateaus, surrounding volcanics, stands of Joshua tree (jaegerensis) were mentioned. The Old Government Road was not confining to visitors, as suggested by an earlier wilderness inventory narrative. A suggestion was made to make an exclusive grazing leased road system to allow grazing to continue while protecting wilderness values.

The Old Government Trail was mentioned by multiple-use supporters who felt its historic value was important and best experienced in a vehicle. A 640-acre area is leased for grazing. The road to Marl Springs is also historic and heavily used. The area has oil, gas, and geothermal potential. Intrusions on wilderness qualities include phone and power lines to the northwest which destroy sunset vistas, railroad noise, and visibility to the east of Kelso night lights.

Workbook Comments

One response concerning the Public Input Guidelines for the Wilderness Study Phase (Workbook, 3/15/79) was received. This response favored a boundary change; the eastern boundary should be moved several miles away from the paved Cima Road and the railroad tracks.

Draft Plan Alternatives

The following public comments specific to WSA 245 were received in response to the Draft Desert Plan. One called for recommending the entire study area as suitable for wilderness under the Protection Alternative. A second comment insisted that the study area be combined with adjacent wilderness study areas in being recommended as suitable for wilderness under the Protection Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Eight-mile Tank Wilderness Study Area (245) is recommended as nonsuitable for wilderness designation.

Although the mineral data were insufficient to evaluate, the site does support a part of the Kessler Spring grazing allotment and represents a portion of a National Environmental Area.

The Wilderness Study Area was rated in the lower third in terms of its relative wilderness values and did not contain any of the values outlined as desert-wide wilderness opportunities. Known competing resource values are low, so it was decided that the highest and best use of the land would be in a less restrictive multiple-use classification.

The area contains known natural and cultural values which include two springs with considerable wildlife value. It was recommended that the Wilderness Study Area be designated as Class L to protect these values and permit access for further mineral evaluation and grazing facility support.

IMPACT OF PROPOSED PLAN

The area has a history of grazing and supports some range improvements. This activity has not degraded the wilderness values in the past, and continued use at the existing level should not impact the area. Generally the terrain is not diverse enough to support mining activities without impacts. One small mountainous area might have localized impacts.

WILDERNESS STUDY AREA 249

Kelso Mountains

GENERAL DESCRIPTION

The northern boundary of the Wilderness Study Area (70,700 acres)[1] is the southern edge of the utility right of way which contains power transmission lines. This boundary is located along a line 400 feet south of the three existing transmission lines (except where a service road may extend outside the right of way). The eastern boundary is Kelbaker Road, and the southern boundary is the railroad from Kelso to Sand. Approximately 5 to 10 percent of this area is non-public land. These parcels are randomly scattered throughout the roadless area. Public Land Order 5224 withdrew NW1/4SE1/4, Section 33, T. 10 N., R. 11 E., from public entry to protect the area for its recreation and public values. Records indicate there are a number of recorded mining claims. This WSA contains 35 percent sand dunes, 20 percent hills, 20 percent alluvial fans, 20 percent dissected fans, and 5 percent sand-covered plains.

WILDERNESS QUALITY

Description of Environment

This area contains a varied topography that includes sand dunes, flat plains, small valleys, medium-sized hills, buttes, bajadas, and steep mountains. The predominant vegetation type is creosote bush scrub with some yucca, cholla cacti, red barrel cacti, and mesquite. The quality of the light pale yellow sand dunes against the dark reddish-brown mountains is very high. Vegetation that covers the sand dunes further adds to the scenic quality of this area.

Natural Condition

There is one specific area where man and his works dominate the landscape: a microwave relay station and access in the mid-northern portion, located in the higher elevations of the Kelso Mountains. This relay station and road have been excluded from further wilderness consideration. There is a well-maintained fence that parallels the Old Kelbaker Road in one portion on the eastern boundary. These two areas do not seriously degrade the over-all primeval character of the landscape. The Wilderness Study Area boundary is common with the roadless area boundary with the exclusion for the relay station and service road.

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[1]Portions of T. 10 N., Rs. 11 and 12 E.; T. 11 N., Rs. 10, 11, and 12 E.; and T. 12 N., Rs. 11 and 12 E., SBM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Outstanding opportunities for solitude can be obtained because of the size of the area and variety of terrain, including a combination of narrow, winding canyons, small valleys, and steep mountains. These land formations create an atmosphere where solitude can be found. In addition, primitive types of recreation can be enjoyed in this area because of the diverse geological landforms.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 89 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for uranium, copper, iron, and other metals in the Kelso Mountains and iron and other metals on Old Dad Mountain. Fifteen claims are recorded.

Vegetation

No unusual plant assemblages occur within WSA 249. Vegetation consists mostly of creosote bush scrub with Mojave yucca and Joshua trees, and allscale scrub. No rare plant species are known to occur within this WSA.

Wildlife

This moderately large Wilderness Study Area includes a variety of habitats, such as sand dunes, flat plains, small valleys, hills, buttes, and mountains. The vegetation is characterized by creosote bush scrub and includes yucca, various cacti, and scattered smoke trees and Joshua trees. Mountains and hills are more sparsely covered with creosote bush and burrobush. Elevation ranges from 1,800 feet on the southwestern edge of the WSA to 4,767 feet at Kelso Peak.

The Kelso and Old Dad Mountains support a herd of desert bighorn sheep, estimated at 60 individuals. Thirty square miles of bighorn seasonal range are located in this WSA; this represents approximately 70 percent of the total range used by this bighorn population.

The Kelso Mountains also contain a single golden eagle eyrie and approximately 70 square miles of foraging area used by a nesting pair of eagles. The southwestern portion of the Devil's Playground also has 13 square miles of desert tortoise habitat at population densities of 50 to 100 animals per square mile. This is part of the Kelso Desert Tortoise Area which contains a core population of this species in the Mojave Desert. Approximately 6 percent of the Kelso Desert Tortoise Area is present in WSA 249. The Mojave fringe-toed lizard, a species highly adapted to areas of fine windblown sand, is present on 55 square miles of the WSA.

Cultural Resources

Approximately 2 square miles of high sensitivity/significance are located along the northern boundary of the proposed WSA. This sensitivity area represents the Old Government Road. Most of this WSA has not been surveyed; many additional sites are predicted.

Native American Uses, Needs, and Sites

The southern extension of the Old Dad Mountains overlaps this Wilderness Study Area in the central section and on the northwestern edge. These mountains have been identified in both Chemehuevi and Mohave myths and were an area of bighorn sheep hunting by the Chemehuevi. Hunting expeditions into this area have been reported by the Panamint Shoshone as well.

Scenic Quality

The study area has a scenic quality rating of "medium." It consists of two scenic quality polygons. The Devil's Playground polygon, which was rated high, received high scores for color and uniqueness, a medium score for landform, and a low score for vegetation. The Kelso Mountains polygon received medium scores for all of the key factors.

General Recreation

There are no known recreation resources in this WSA.

Range Uses and Potential

This WSA contains portions of the Granite Mountain and Kessler Springs Allotments.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Most public comments were generally supportive of the findings. Other comments addressed study phase considerations.

Study Phase

Twenty-five letters were received on WSA 249. Fifteen favored wilderness designation for the area. These letters often suggested a boundary alteration so that one large Devil's Playground Wilderness Area would result. One letter proposed excluding the microwave tower and its roads. Several types of vegetation were listed as needing wilderness protection. The yucca, cactus, desert holly, and wildflowers were mentioned. The tortoise, reptiles, and rare insects were wildlife also specifically listed by protection concerns. One letter saw the Kelso Mountains as a good buffer zone between WSAs 243 and 250. The Bristol Mountains were often listed as being scenic and containing many fine wilderness features. The petroglyphs and geologically unique features were listed for preservation by many letters. Primitive recreation, such as hiking, backpacking, and climbing, was desired by a few.

The letters opposing wilderness designation often spoke of sights and sounds as detracting from the area's wilderness potential: transmission line, roads, mines, microwave site, railroad, low-flying aircraft, military activities, and range facilities. Wilderness designation was seen as cutting back or prohibiting continuation of current range use. Geothermal potential was noted in one letter, and a letter was received from a rockhound concerned about vehicle access.

Two comments were received in response to the workbook. Both favored maintaining existing use. The railroad and man's marks were seen as degrading the area. One letter stated that dirt roads exist in this WSA, and it strongly expressed the desire for more room for motorized vehicle use.

Draft Plan Alternatives

The following range of public comments specific to WSA 249 was received in response to the Draft Desert Plan Alternatives. One expressed agreement with the Protection Alternative, another called for larger recommendations of land suitable for wilderness under the Balanced Alternative (for example, Devil's Playground, the entire study area, and more nonmountainous terrain), while a third insisted on the need for vehicle access routes within wilderness areas. In addition, one stated that exploration for and development of oil, gas, and geothermal resources under the No Action Alternative were the best uses for the study area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Kelso Mountains Wilderness Study Area (249) is recommended as nonsuitable for wilderness designation.

The area has potential for metals in both the Kelso and Old Dad Mountains. The WSA also supports a portion of the Granite Mountain and Kessler Springs grazing allotments.

This WSA ranked low (89) in relative wilderness values and did not exhibit any of the qualities identified as desert-wide wilderness opportunities. It was determined that mineral values exceeded the wilderness values and that the highest and best use of the area would be one that permitted access for mineral exploration and development, plus expansion of grazing support facilities.

The entire area was recommended for Class L. The area includes a bighorn sheep herd of 60 individuals. This designation would protect these natural values and the cultural resources which have been identified.

IMPACT OF PROPOSED PLAN

All public lands in this WSA have been recommended for designation as Class L. There is a history of grazing in the area; continued at the existing levels, impacts to the area would be minimal. The terrain in the area is so diverse that the amount of grazing and range improvements could be increased, with mitigation, and not significantly impact the area. Some other activities could be absorbed to a degree, but site specific analysis would be required.

WILDERNESS STUDY AREA 250

Kelso Dunes

General Desscription

The southern boundary of this area (161,900 acres)[1] is a transmission line right of way and service road. The western boundary is a well-graded telephone line road through Broadwell Dry Lake Valley. The northern boundary of the Wilderness Study Area is the southern edge of the utility right of way which contains power transmission lines. This boundary is located along a line 400 feet south of three existing transmission lines (except where a service road may extend outside the right of way). To the east, the boundary is the paved Kelbaker Road.

The area has a complex land ownership pattern, with non-public lands occurring in north and south columns. Non-public lands account for approximately 30 percent of the entire area. Approximately 17 acres in the eastern portion of the area have been withdrawn from public entry to protect the recreational and public values under Public Land Order 5224. Under Executive Order of August 8, 1914 (Public Water Reserve 22), NW1/4NE1/4 Section 32, T. 10 N., R. 9 E., was withdrawn for a public water reserve. The northern edge and the northeastern corner of the area have several recorded mining claims. This WSA contains 30 percent hills, 30 percent alluvial fans, 20 percent sand dunes, 5 percent dissected fans, 5 percent mountains, 3 percent sand-covered plains, 3 percent sand-covered fans, 2 percent highly dissected fans, and 2 percent riverwashes. Most soils in this WSA are highly to moderately sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

This extremely large area contains a variety of landforms. The Kelso Dunes, the tallest dunes in the California desert, are located within its borders, as well as two large, sweeping valleys and the extensive, rolling Bristol Mountains. Vegetation is sparse, consisting mostly of creosote and mixed shrubs. Throughout much of the area, sweeping views across open desert to the steep, rugged Granite and Providence Mountains enhance the scenic nature of the area.

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[1]Portions of T. 8 N., Rs. 8 and 9 N.; T. 9 N., Rs. 7, 8, 9, 10, 11, and 12 E.; and T. 11 N., Rs. 8, 9, 10, 11, 12, and 13 E., SBM.

Natural Condition

The Wilderness Study Area boundary is common with the roadless area boundary with the exception of a small excluded area between two parallel roads in the southeastern corner. Excluded from the Wilderness Study Areas were patented mining claims located at Section 10 (T. 9 N., R. 8 E), Section 2 (T. 8 N., R. 12 E), and Sections 24 and 25 (T.9 N., R. 12 E). The area appears to have retained natural values with the limited exceptions being unnoticeable away from the immediate area.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Variety of terrain, numerous enclosed areas, and the immensity of the landscape offer outstanding opportunities for solitude. Opportunities for a primitive and unconfined type of recreation are also outstanding. Experiences vary with the location, ranging from the intimacy of small, enclosed canyons and valleys in the hills to the vastness of the large, open valleys.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 11 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has known potential and reserves of iron and gold throughout the Kelso Dunes and potential for metals, uranium, and perlite in the Bristol Mountains. There are about 30 claims recorded.

Vegetation

The most striking feature of the WSA is the magnificent Kelso Dunes and its associated unusual plant assemblage. Although no sensitive or significant species occur on the dunes proper, a few uncommon plants of limited distribution do, for example, Limanthus arenicola, Astragalus lintiginosus var. borreganus and Penstemon Thurberi. Otherwise, the dunes are unusual because of their great size and height and their high species diversity. The predominant vegetation throughout the WSA is creosote bush scrub with allscale scrub and other alkali-adapted vegetation types occurring sporadically, usually around the margins of dry lakes such as Broadwell Dry

Lake. No very rare or threatened and endangered species are known to occur within the WSA.

Wildlife

Wilderness Study Area 250 is a large area extending from west of the Bristol Mountains east through the Devil's Playground. Elevations range from approximately 1,296 feet at Broadwell Dry Lake to about 3,900 feet in the Bristol Mountains. A variety of habitats is represented in this WSA, from creosote bush flats to Joshua tree. The Bristol Mountains are currently used by bighorn sheep as transient range; about 150 square miles (45%) of this range are within the WSA. The Bristol Mountains are important to the survival of the isolated Cady Mountains bighorn sheep population (25 sheep) as these mountains provide contact with other sheep populations to the east in the Old Dad and Granite Mountains.

This WSA also includes about 4 square miles of prairie falcon foraging area. Two significant species, Mojave fringe-toed lizard (75 square miles) and western pipistrelle, are also found here. The northern Bristol Mountains also include two water sources which have been surveyed.

Included in the eastern portion of this WSA are about 45 square miles of the Kelso Dunes ACEC, one of the highest dune systems in the United States, which, along with the Devil's Playground (also within the WSA), comprises one of the largest aeolian habitats of the California desert. The Kelso dunes are inhabitated by seven species of insects which are endemic to these dunes. The Mojave fringe-toed lizard, mentioned above, is declining in much of its range as a result of habitat loss, but these populations appear to be in excellent condition in the Kelso Dunes. A number of other reptile species are also present in these dunes. Ninety percent of the dune system is located within this WSA.

Cultural Resources

A number of sensitive/significant areas are located within this proposed WSA.

Native American Uses, Needs, and Sites

Few Native American resources are documented for this Wilderness Study Area. A Chemehuevi-Serrano boundary runs through the extreme western part of the area, which may indicate that this area was used by both ethnic groups.

Scenic Quality

The study area has an over-all scenic quality rating of "medium." It includes portions of at least eight scenic quality polygons spanning the range from low to very high. The significant scenic feature in this study area is the Kelso Dunes system. The Kelso Dune scenic quality polygon received an outstanding rating.

General Recreation

There are seven interpretive sites in the WSA. The Kelso Dunes, rated .high, lie at the eastern end of the Devil's Playground and consist of windblown sand towering over 600 feet above the surrounding desert floor. The Kelso Dunes have a variety of plant and animal communities. The town of Kelso, rated medium, was an important water and food stop during the earlier days of the Union Pacific Railroad. The depot at Kelso (constructed 1924) is of Spanish-style architecture. Five unevaluated interpretive sites are Bristol Mountains, Natural Arch (Bristol Mountains), Trembley Canyon, the Lost Kelso Whisky, and Hidden Spring.

There is one teaching and research area receiving eight or more visits per year by pre-college, college, and university classes. The Kelso Dunes are a good floral area with evening primrose, desert sunflower, and desert lily on the lower southern slopes and the edge of dunes. The Kelbaker Road is an excellent floral area between the Granite Mountains and Kelso. In the same section, on the extreme western side, and along southern boundary, there is excellent rockhounding.

One concentrated use zone is totally contained in the WSA. It had 5,308 annual visitor use days in 1978 with shooting, camping, and sightseeing the main activities. A second concentrated use zone is partially contained in the WSA. It had 6,269 annual visitor use days with nature-oriented activities and shooting the main activities. The Kelso Dunes are a Natural Environment Area and an Outstanding Natural Area. They are closed to motorized vehicle use under the ICMP.

Range Uses and Potential

A portion of the Granite Mountain Allotment is contained in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Most of the public comments received regarding this area agreed with the findings on naturalness; however, many of these same commenters felt that the area was better suited to non-wilderness uses. There were also several comments which discussed, in very general terms, impacts which would degrade the natural condition. Reevaluation by the field team did not validate these latter comments.

Study Phase

A majority of about 70 comments discussing WSA 250 supported multiple-use designation for the area. Many felt the area's highest value was recreation and that the extremely large size of the area required that vehicle access be allowed to penetrate the interior of the area. Broadwell Mesa and Hyten Spring were excellent spots to visit but too remote for hikers. The challenging nature of the area's dune systems for motorized vehicle

recreation was noted, although some felt the closure to vehicles of the unique Kelso Dunes should continue. This is also a prime rockhounding area, especially the western portion, and long-time users want continued vehicle access. The area contains 5,158 acres leased for grazing. The private land holdings in the area are too extensive to consider the area as wilderness, some believe. The area has good educational opportunities requiring vehicles. Geothermal, oil, and gas potential exists throughout the area. Iron, titanium, and feldspar are mentioned, and the western half of the area has uranium potential and should be excluded from the WSA. Sight-and-sound intrusions into the area, which should result in boundary adjustment, include the railroad line, pumping and irrigation stations, and aircraft traffic. Depending on their multiple-use interest, some commenters recommended partial exclusions.

Some motorized vehicle recreationists thought the Devil's Playground area could be excluded from the Wilderness Study Area; rockhounds and mining interests suggested exclusion of the Bristol Mountains. The scenic and ecological features of the Devil's Playground were most frequently mentioned in support of wilderness designation, Kelso Dunes in particular. The author of one comment included an article he wrote explaining the Kelso Dunes' "booming sand" quality, described as a "rare, and almost mystical phenomenon," which requires freedom from vehicle noise pollution to experience. Hyten Spring, Broadwell Mesa "the epitome of solitude in basalt," and the natural arch are some places mentioned by wilderness supporters. Other features worthy of wilderness protection include: an unusual plant and animal life, including the Mojave fringe-toed lizard, rare grasses, Cromgedes kelsoenis; and excellent opportunities for hard-core desert hiking and educational and scientific opportunities.

Many comments were received in response to the workbook. Southern California Gas Company favored moving boundaries 100 feet from roads to provide room for maintenance. Another reply favored boundary changes to enhance wilderness. Another stated a strong desire to restrict motorized vehicle use and felt it is a good wilderness site. One letter disagreed with withdrawal of public lands. Another expressed the need for recreational access into the area because of its size. One reply felt that there was no basis for wilderness designation.

Draft Plan Alternatives

A variety of public comments specific to WSA 250 were received in response to the Draft Desert Plan Alternatives.. One indicatd complete agreement with the Protection Alternative, another expressed agreement with the Balanced Alternative, while a third insisted on combining this WSA with WSAs 262, 263, 264, 265, and 266 in being recommended as suitable for wilderness under the Protection Alternative. Another called for wilderness with improved vehicle access routes. One simply stated that rockhounding was a major use of the study area. In addition one insisted that the exploration for and development of oil, gas, and geothermal resources, under the No Action Alternative, were the best uses of the study area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The eastern portion (approximately one-third) of Wilderness Study Area 250, Kelso Dunes, is recommended as suitable for wilderness designation. This portion includes part of the area known as the Devil's Playground (Kelso Dunes).

This WSA ranked 11 in relative wilderness values and the Kelso Dunes were identified as a unique landform. The high rating and unique landform are recognized parts of the desert-wide wilderness objectives. Although conflicts exist between mineral resources, recreation, and wilderness designation, it was decided that the wilderness values were of greater significance.

The western portion of the WSA, which includes the Bristol Mountains, was designated Class L. The area contains a number of cultural resource sensitive/significant areas. The Bristol Mountains are important wildlife areas. It includes bighorn sheep transient range, prairie falcon foraging, and important water sources. The Class L designation will protect those resources and still permit access for both mineral exploration and recreation use.

IMPACT OF PROPOSED PLAN

No adverse impact to wilderness values is anticipated by recommended class designations in this WSA. High wilderness values in the eastern portion of the WSA would be fully protected through wilderness designation. The Class L designation throughout the majority of the WSA and Class M in the southwestern corner should provide adequate protection of wilderness values in these areas.

WILDERNESS STUDY AREA 251

Cady Mountains

GENERAL DESCRIPTION

The southern boundary of this area (91,250 acres)[1] is the Atcheson, Topeka and Santa Fe (AT&SF) Railroad. The southeastern boundary of the Wilderness Study Area is the northwestern edge of the utility right of way which contains power transmission lines. This boundary is located along a line 400 feet northwest of the three existing transmission lines (except where a service road may extend outside the right of way). The northern border is largely the Union Pacific Railroad. The western boundary is formed by privately developed roads between Mannix and Newberry Springs. The area is 60 percent public lands alternating with non-public lands in north-south strips. There is a small protective withdrawal under Public Land Order 5224 near the northwestern edge of the area. There are at least 20 recorded mining claims in the north-central portion of the study area. This WSA contains 40 percent hills, 20 percent sand-covered fans, 13 percent highly dissected fans, 10 percent sand-covered dissected fans, 10 percent dissected fans, 5 percent alluvial fans, and 2 percent sand-covered pediments.

WILDERNESS QUALITY

Description of Environment

This extremely large area includes the Troy Lake depression, the Cady Mountains, and a portion of the Mojave River Sink. The Cady Mountains are a low, dark series of detached ridges rising 1,000 feet to 1,500 feet above the intervening valleys. Washes which bisect the ridges are broad and contain wind-deposited sand. On the eastern side of the Cady Mountains, a valley of loose, sandy soil slopes generally northeast into the Mojave River Valley and Afton Canyon, with its steep, multicolored, highly eroded canyon walls. Vegetation in the Cady Mountains is largely saltbush and other low shrubs.

Natural Condition

The western edge of the area is in private ownership, from the Mojave River south to the Troy Lake depression. The area contains permanent facilities in the form of small ranches, homes, developed water sources, small lakes, and a lattice of maintained access roads. Several mining and quarry operations are also scattered along the western edge. A microwave relay facility is located along the powerline boundary approximately 4 miles north of its intersection with the the southern border, but it is only visible from near the powerline

[1]Portions of T. 9 N., Rs. 5, 6, and 7 E.; T. 10 N., Rs. 5, 6, and 7 E.; and T. 11 N., Rs. 5, 6, and 7 E., SBM.

boundary. Elsewhere, unmaintained ways lead to apparently abandoned mining operations, but they are substantially unnoticeable. Exclusions from further wilderness consideration have been made for mining activity along the southern slopes of these mountains. The boundaries of the Wilderness Study Area are common with the roadless area border from Afton to Balch Siding. Returning along the southeastern powerline border to the AT&SF railroad, the borders are also common but exclude the microwave relay facility. The southern border has been drawn along the mountain bajada interface and excludes roads and mining impacts along this boundary. The western border starts east of Newberry Road and proceeds due north along the edges of the mountains from Section 19 (T. 9 N., R. 5 E) to the Mojave River which it follows generally eastward to Afton. The arbitrary western border excludes the western end of the area where permanent facilities (roads, habitations, and ways) have severely altered the primeval character and influence of the land and the area north of the Mojave River where solitude and a diversity of recreational opportunities are lacking.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type Recreation

The extreme size of the area gives the visitor a feeling of isolation in the sandy valleys and among the highly eroded, exposed ridges. The character of the landscape does not reflect the presence of man. The area contains vast areas of windblown sand and volcanic ridges, thus providing outstanding opportunities for primitive and unconfined recreation. However, the portion to the north, just south of the Union Pacific Railroad, lacks vegetative or topographic screening and has only limited opportunities for solitude and primivite types of recreation and therefore has been excluded.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 92 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for manganese and other metals, fluorite, strontium, and uranium. Twenty claims are recorded.

Vegetation

No unusual plant assemblages occur within WSA 251. Vegetation consists of creosote bush scrub. No sensitive or significant plant species are known to occur with this WSA.

Wildlife

Wildlife values include the Cady Mountains desert bighorn sheep herd, estimated at 25 individuals and declining. Approximately 75 percent of the total range used by this herd, consisting of 100 percent (10 square miles) of the permanent range and 70 percent (40 square miles) of the seasonal range, is present within WSA 251. This area is a bighorn sheep proposed ACEC. There are 65 square miles of prairie falcon and golden eagle foraging habitat and one prairie falcon eyrie and two golden eagle eyries also in this WSA. There are also 17 square miles of habitat for the Mojave fringe-toed lizard. Two springs have significant wildlife value.

Cultural Resources

Several areas of cultural resource sensitivity/significance are located within this WSA.

Native American Uses, Needs, and Sites

Few Native American resources are documented for this WSA. A Chemehuevi-Serrano boundary runs through the extreme western part of the area. This indicates that this area was used by both ethnic groups.

Scenic Quality

The study area has an overall scenic quality rating of "low-medium." It covers portions of about five scenic quality polygons with ratings from low to medium. The Cady Mountains, which dominate the scenery, received medium scores for all key factors. The surrounding foothills and valleys received low overall scenic quality ratings.

General Recreation

There are four unevaluated interpretive sites in the WSA. They include the Cady Mountains, the Cady Mountain Mineral Area, Pastel Canyon, and the Sleeping Beauty.

There is one teaching and research area with at most four visits annually from pre-college, college, and university classes.

There is excellent rockhounding in the Cady Mountains for agates, jasper, and chalcedony.

Range Uses and Potential

This WSA contains a portion of the Afton Canyon Allotment.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments indicate the presence of several ways within the area used for rockhounding and as access to mines. Potential geothermal and mineral resources are also noted. Other comments agreed with the findings. Mining areas along the southern boundary have been excluded from further wilderness consideration, where appropriate.

Study Phase

Of about 50 letters, the overwhelming majority did not favor further study of this area for wilderness. Intrusions on wilderness qualities were frequently mentioned: grazing inpacts, air pollution from nearby industry, low-flying aircraft, city lights visible at night, railroads on both the north and south, heavy motorized vehicle use, BLM campground use, two V.O.R. units maintained by the FAA, and the old Tonapah and Tidewater Railroad remnants within the area. A Class I air quality designation might affect limestone and mining operations nearby; at the least, a 1-mile buffer zone was requested. Many find the area good for motorized vehicle use; some recommended an open area designated under the ICMP. To some the area is flat and lacks attractiveness and would be best suited for motorized vehicle free play. For others, it is a "rockhound's paradise." Access to Afton Canyon from Ludlow via a way through Mesquite Springs and Broadwell Lake was urged. The Crucero Road was desired by rockhounds for access. It was stated that private land holdings are too extensive; the area is less than 5,000 acres without them. Fossil collecting by universities requires an open designation, according to one letter. Mineralization and grazing were mentioned generally. Two comments noted geothermal potential in the area.

Letters supporting wilderness designation discussed preservation of this desert ecosystem, particularly the Mojave River portions; the presence of the Old Mojave Road, which is excellent for hiking and riding; and photography and picnicking opportunities. The inclusion of Afton Canyon was suggested. A Boy Scout trip to the high point of the Cady Mountains was described in one letter supporting wilderness.

Numerous comments in response to the workbook were received. These responses requested that this area be removed from wilderness consideration because of its greater value to gem societies than as wilderness. It was also noted that the great amount of private property would be too expensive to acquire.

Draft Plan Alternatives

The following range of public comments specific to WSA 251 was received in response to the Draft Desert Plan Alternatives. One agreed with the Balanced

Alternative's recommendations, another suggested that the entire study area be recommended as suitable for wilderness under the Balanced Alternative, while a third called for recommending a greater acreage as suitable for wilderness than in the Protection Alternative.

SUMMARY OF RATIONALE FOR PROPOSED PLAN

The Cady Mountains Wilderness Study Area (251) is recommended as nonsuitable for wilderness designation.

The area ranked low (92) in terms of relative wilderness values and did not possess any of the qualities identified as desert-wide wilderness opportunities. The area has potential for metals and other minerals. It supports a portion of the Afton Canyon grazing allotment and contains excellent rockhounding potential. Considering these facts it was decided that the values of the recreation and mineral resources were of greater significance than those of wilderness.

The area was recommended for Class L (approximately 50%) and Class M. The Class L area roughly coincides with the Cady Mountains. This classification would protect the natural and cultural values, which include a small herd of bighorn sheep, prairie falcons and golden eagles, plus other wildlife and their habitats. The Class M designation includes areas on the eastern and western sides of the Cady Mountians. It was determined that this classification was needed to allow greater access for mineral exploration and more intense recreation.

IMPACT OF PROPOSED PLAN

The WSA was recommended for Class L in the central part and M along the western edge and northeastern corner. Class M parts have scattered mined areas and facilities. Should this activity increase or become more extensive, wilderness values would likely be lost. In the part of the WSA recommended for Class L, little activity occurs, and the wilderness values would likely not be severely impacted.

WILDERNESS STUDY AREA 251A

Mesquite Spring

GENERAL DESCRIPTION

The northern border of this area (19,300 acres)[1] is the Union Pacific Railroad. The southern boundary of the area is the northern edge of the unility right of way which contains power transmission lines. This boundary is located along a line 400 feet north of the three existing transmission lines (except where a service road may extend outside the right of way). The western border is a woodpole utility line. The area is roughly 75 percent public lands in the north, with alternating strip patterns of non-public lands in the south. This WSA contains 45 percent sand-covered plains, 40 percent sand-covered aluvial fans, 10 percent sand-covered hills, 3 percent hills, and 2 percent playas.

WILDERNESS QUALITY

Description of Environment

The area includes the scattered Mesquite Hills and sloping alluvial formation associated with the northern end of the Bristol Mountains. The northeastern portion of the area is influenced by the Devil's Playground area and contains areas of deep wind-deposited dune sand. The whole area is very low, with elevations ranging from 988 to 1,300 feet on the alluvium to 1,568 feet on Crecero Hill. Vegetation is sparse with scattered saltbush in the sandy locations and a creosote bush scrub plant community on the southern rocky alluvium.

Natural Condition

The area is affected primarily by natural forces of nature throughout. Ways are used by motorized vehicles, especially in the Mesquite Hills area, but they are subject to rehabilitation by the blowing sand in the area. Thus the wilderness condition is restored. The Wilderness Study Area boundary is common with the roadless area boundary.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The vastness of the visible landscape and absence of man-made features provide outstanding opportunities for solitude and unrestricted movement through a classic desert setting.

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[1]Portions of T. 10 N., Rs. 7 and 8 E.; and T. 11 N., Rs. 7, 8, and 9E., SBM.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 133 out of 137 WSA.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for metals in the mountains and sodium, oil, and gas in the northern portion. No claims are recorded.

Vegetation

No unusual plant assemblages occur within WSA 251A. Vegetation within the WSA consists mostly of creosote bush scrub. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

The most significant wildlife value is 4 square miles of habitat for the Mojave fringe-toed lizard, a species which is highly adapted to sandy habitats and which is present in the eastern and central Mojave Desert.

Cultural Resources

Seventeen square miles of very high sensitivity/significance are located in the WSA.

Native American Uses, Needs, and Sites

Few Native American resources are documented for this Wilderness Study Area. A Chemehuevi-Serrano boundary runs through the extreme western part of the area; this may indicate that this area was used by both ethnic groups. Contemporary Chemehuevi have identified portions of the WSA as an area used for traditional collection. These activities seem to be concentrated in the northwestern portion of the WSA.

Scenic Quality

This study area has an over-all scenic quality rating of "low." It covers portions of two scenic quality polygons. One received low scores for all of the key factors, and the other received medium scores for all key factors.

General Recreation

There is one unevaluated interpretive site near Crucero.

Range Uses and Potential

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

All comments dealt with study phase considerations.

Study Phase

All study phase comments regarding this Area supported multiple-use designation of the area. Geothermal potential, for which a non-competitive lease application has been filed, exists in this area; wilderness designation would preclude exploration for this needed resource. Oil and gas reserves may also exist. The economic importance of mineral exploration and development is stressed, with recommendations for wilderness limitations to Areas of Critical Environmental Concern. Motorized vehicle use is popular in the Sand Hills area near Crucero; the area has a high potential for future use. Other objections to wilderness designation include the following: the roadless area contains less than 5,000 areas with private land excluded; there is too much private land for the area to be a wilderness area; and the existing transmission line and road influence negatively wilderness qualities for up to 2-1/2 miles into the Wilderness Study Area.

Draft Plan Alternatives

The following public comments specific to WSA 251A were received in response to the Draft Desert Alternatives. One indicated complete agreement with the Balanced Alternative's recommendations. Another requested that the entire study area be recommended as suitable for wilderness under the Balanced Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Mesquite Spring Wilderness Study Area (251A) is recommended as nonsuitable for wilderness designation.

The study area ranked very low in terms of its relative wilderness values and did not possess any of the qualities identified as desert-wide wilderness objectives.

Competing resource values were considered to be relatively low, but it was decided that they were of greater importance than the wilderness values. The entire study area is recommended for Class M designation. This class would provide a degree of protection for the natural and cultural resources, while

permitting increased access for mineral exploration and development and more intense vehicular recreation.

IMPACT OF PROPOSED PLAN

The area is recommended for Class M. The principal impacts upon this area in recent years have resulted from ORV use. The sandy areas, which are characterized by blowing sand, have tended to blot out lasting signs of vehicle use.

WILDERNESS STUDY AREA 252

Sleeping Beauty Mountain

GENERAL DESCRIPTION

This triangular-shaped area (25,670 acres)[1] is bounded completely by utility lines. The northern boundary is the southern edge of the utility right of way which contains power transmission lines. This boundary is located along a line 400 feet south of the three existing lines (except where a service road may extend outside the right of way). The eastern boundary is a graded road and a telephone line right of way. The southern boundary is a powerline/gas line right of way, with associated maintenance road.

The roadless area is approximately 60 percent public land with non-public holdings occurring in alternating north-south strips. There are recorded mining claims in the extreme southern portion of the area. This WSA contains 50 percent hills, 40 percent alluvial fans, and 10 percent dissected alluvial fans. Most soils in this WSA are highly sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

The area contains the South Cady Mountains. A large, sweeping bajada is located near the center, sloping eastward to Broadwell Dry Lake. Vegetation on the bajada is scattered and consists of cactus, creosote, and mixed shrubs. Except in the canyons and washes, vegetation in the mountains is sparse.

Natural Condition

The area is relatively undisturbed by man. Man's influence, which includes only a few primitive ways and a few abandoned mine shafts and prospect holes, is substantially unnoticeable because of the topographic screening in the hills. Much of the southern slope of the South Cady Mountains has been excluded from further wilderness consideration because of extensive mining scars which greatly impact naturalness. Both the Black Butte and the Argus mines have been similarly excluded, along with the other mines on that southern slope. Other mining activity at the Old Dominion mine and a short maintained road have also been excluded at the northernmost point of the roadless area.

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[1]Portions of T. 8 N., Rs.6, 7, and 8 E.; and T. 9 N., Rs. 6, 7, and 8 E., SBM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The variety of terrain in the hills offers many outstanding opportunities for solitude by providing areas of seclusion and isolation. Size and terrain variety are also responsible for the area's outstanding opportunities for primitive and unconfined types of recreation. Visitors can experience both the intimacy of small, enclosed areas in the hills and canyons and the vastness and openess of the large bajada between the South Cady Mountains and the Cady Mountains. The relative absence of internal man-made features also enhances opportunities for primitive and unconfined types of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 130 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has known occurrence of strontium (celestite), manganese, and barite and possible potential for manganese, sodium, geothermal energy, oil and gas. No claims are reported on the printout.

Vegetation

No unusual plant assemblages occur within WSA 252. Vegetation consists mostly of creosote bush scrub. No sensitive plant species are known to occur within this WSA.

Wildlife

This area contains the South Cady Mountains. Vegetation on the bajada consists of scattered cactus, creosote bush, and mixed shrubs. The Cady Mountains desert bighorn sheep herd, estimated at 25 and declining, uses 8 square miles of this WSA as seasonal range. This includes approximately 10 percent of the total range for this bighorn herd. A total of 8 square miles of prairie falcon foraging area and 32 square miles of golden eagle foraging area are also present here. The Mojave fringe-toed lizard, a species highly adapted to sand dwelling and present over the eastern and central Mojave Desert, ranges over 17 square miles of this WSA.

Cultural Resources

Eight square miles of known high sensitivity/significance are located in the south-central portion of the proposed WSA. The only recorded site in the area is the Preston mine and associated artifacts. However, the area has not been surveyed and many more sites, especially lithics, can be predicted.

Native American Uses, Needs, and Sites

Few Native American resources are documented for this WSA. A Chemehuevi-Serrano boundary runs through the extreme western part of the area. This may indicate that the area was used by both ethnic groups. Contemporary Chemehuevi have identified portions of the WSA as an area for traditional collection. These activities seem to be concentrated in the northwestern portion of the WSA.

Scenic Quality

The study area has an over-all scenic quality of "low." It includes portions of two scenic quality polygons. The mountainous portion received medium scores for all key factors, while the valley received low scores for landform, color, and vegetation and a medium score for uniqueness.

General Recreation

The only interpretive site is unevaluated. It is called the Sleeping Beauty and consists of a formation resembling a dormant smiling human face outlined by the crest of the Cady Mountains. There is excellent rockhounding for agates, jasper, and chalcedony. There are good hunting opportunities for quail.

Range Uses and Potential

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments referred to the presence of roads and ways, expressed interest in motorized recreation and pointed out potential mineral and energy resources. Roads and ways were evaluated and excluded from further wilderness consideration, where appropriate.

Study Phase

Comments on this area overwhelmingly favored a multiple-use designation. Many comments lauded the area's rockhounding value: agates, jasper, jaganite, obsidian, chalcedony, calcite crystals, quartz crystals, geodes, banded onyx, nodules, dehydritic materials, opalite, silicates, and petrified palm wood and reed are among the collectibles that make this area "very

special" to rockhounds. Access on the way from Broadwell Lake to the Cady Mountains, shrinking the eastern border of the WSA at least 5 miles towards the Cady Mountains, and other routes of access are urged for rockhound purposes. Backpacking, camping, four-wheel driving, motorcycling, nature study, trail riding, and vehicle competition are among the other recreational values that supporters of multiple-use designation list, saying the area is too hot and dry for extended hiking. This area, and the Bristol Mountains in general, has geothermal potential. The Lavic Mining District offers manganese, barite, strontium, and bentonite clay resources. Scientific, ecological, geological, and scientific values are few here, compared to other desert areas. Interstate 40 and the Union Pacific Railroad intrude upon solitude. The area is too large to be practical for wilderness designation.

Support for further wilderness study mentioned general scientific, educational, geological, and scenic values.

Some comments received in response to the workbook, recommended that the area be used for rockhounding hobbyists and other recreationalists.

Draft Plan Alternatives

A variety of public comments specific to WSA 252 was received in response to the Draft Desert Plan Alternatives. One indicated complete agreement with the Protection Alternative, another favored the Balanced Alternative, while a third insisted that a larger acreage be recommended as suitable for wilderness than in the Protection Alternative. Another wanted the Balanced Alternative to retain vehicle access routes within wilderness areas. One comment stated that rockhounding was a major recreational activity within the WSA. In addition, some considered that the exploration for and development of oil, gas, and geothermal resources, under the No Action Alternative, were the best uses of the study area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 252, Sleeping Beauty Mountain, is recommended as nonsuitable for wilderness designation.

The area ranked very low (130) in relative wilderness quality and did not exhibit any of the qualities identified in the desert-wide wilderness objectives. The WSA has known potential for mineral development, is a favorite site for rockhounds, and offers good quail hunting. The eastern portion includes the Cady Mountains, which support a small, declining bighorn sheep herd. The entire area provides forage for both prairie falcons and golden eagles.

Two classes, L and M, are recommended for this area. The L designation in the eastern portion includes the Cady Mountains. This class is necessary to protect the known wildlife values in the area. The Class M designation would provide for increased mineral exploration and development and recreational use, motorized and unmotorized.

IMPACT OF PROPOSED PLAN

The Class M designation would result in moderate adverse impacts on wilderness and scenic quality, even though both rated low. The mineral and grazing development would adversely impact naturalness and scenic quality, while access on identified routes would impair opportunities for solitude.

WILDERNESS STUDY AREA 256

Bristol/Granite Mountains

General Description

The area (93,900 acres)[1] is bounded on the north by a high capacity powerline right of way, on the west by a well-maintained telephone line road, and on the south by Interstate 40. To the southeast and east, it is bounded by roads used by cattle ranchers to maintain wells, springs, and corrals. On the southwest corner it is bounded by a natural gas pipeline. The roadless area is approximately 70 percent public land with non-public holdings occurring in alternating north-south strips of odd sections. There are six small areas withdrawn for public water reserves. There are also three small protective withdrawals within the study area. There is at least one recorded mining claim. The WSA contains 25 percent mountains, 25 percent hills, 20 percent alluvial fans, 15 percent dissected fans, 5 percent highly dissected fans, 5 percent riverwashes, 2 percent sand-covered dissected fans, 2 percent pediments, and 1 percent sand-covered pediments. Most soils in this WSA are highly sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

The Granite Mountains comprise the dominant landform feature. Pinyon pine and juniper cover the upper portions of the mountains. The Old Dad Mountains and the Bristol Mountains are also located within the area. The Old Dad Mountains appear to be a tilted and bisected volcanic plain, while the Bristol Mountains have a more rolling character. Vegetation on both ranges is sparse. The area also contains some large valleys where creosote and mixed desert shrubs dominate.

Natural Condition

This area generally retains its primeval character. Man's impacts, which include a few unimproved ways to abandoned mines, mining shacks, and old corrals, are substantially unnoticeable because of topographic and vegetative screening. The boundaries of the Wilderness Study Area are common with the roadless area boundaries but exclude the southern half of Sections 33, 34, 35, 36 (T. 8 N., R. 10 E.) and access roads to this mining area. Other roads excluded from the Wilderness Study Area are those in Budweiser Wash to Section 20 (T. 8 N., R. 12 E.), to Willow Spring Basin in Section 26 (T. 8 N., R. 12 E), and to the Onyx mine in Section 8 (T. 8 N., R. 10 E.).

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[1]Portions of T. 7 N., Rs. 10, 11, and 12 E.; T. 8 N., Rs. 8, 9, 10, 11, 12, and 13 E.; and T. 9 N., Rs. 10, 11, 12, and 13 E., SBM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

This area contains outstanding opportunities for solitude in its immense valleys and in the mountains. The large valleys offer a sense of vastness and spaciousness, while the coves and interior valleys in the mountains provide a sense of enclosure and seclusion. Because of the area's variety of terrain and relative lack of internal man-made features, opportunities for a primitive and unconfined type of recreation are outstanding.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 30 out of 137 WSA.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has known occurrences of and potential for metals (iron, copper, lead, silver) in the Granite Mountains and perlite and uranium in the Bristol Mountains. Two claims are recorded.

Vegetation

No unusual plant assemblages occur within WSA 256. Vegetation within the WSA consists mostly of creosote bush scrub with Mojave yuccas and, in the Granite Mountains, succulent scrub, blackbrush scrub, and Utah juniper-one leaf pinyon woodland. One sensitive plant species (Monadella robisonii) is known to occur within this WSA.

Wildlife

This area has considerable wildlife value and has been studied extensively. The Granite Mountains bighorn sheep herd has about 45 animals. Another sheep herd, estimated at 5 individuals and declining, is in the Old Dad Mountains. The Bristol Mountains contain transient bighorn sheep range. This WSA contains approximately 95 percent of the total range, entirely comprised of permanent range, of the Granite Mountains bighorn sheep herd. Approximately 20 percent of the bighorn transient range in the Bristol Mountains is also present here. The entire range of the Old Dad Mountains bighorn sheep herd is also found in WSA 256.

About 85 square miles of the WSA is golden eagle foraging area around two known eyries. There is at least one prairie falcon eyrie, with the adjacent foraging also present. There are 22 springs in the Granite Mountains which are important components of several mule deer concentration areas, as well as being important to the bighorn. Other species of interest include the black-headed snake, Panamint chipmunk, and Mojave fringe-toed lizard.

Cultural Resources

In the northeastern corner of this WSA are about 17 square miles of known high cultural resource sensitivity/significance. No systematic surveys have been conducted in this area; however, two petroglyph loci and a temporary campsite have been recorded. Several aboriginal hunting blinds were noted by a layman in conjunction with the Bighorn Basin portion of this area, and undoubtedly several sites can be expected in this well-watered area.

Adjoining this area are 15 square miles of very high cultural resources sensitivity. Twenty-one sites of a wide variety (petroglyphs, historic, temporary camps, a village, lithic scatters, etc.) have been recorded. At least a score of other sites, mainly petroglyph loci, have been recently reported in this area.

Along the southern edge of this WSA, just southwest of the Old Dad Mountains, are 7 square miles of high cultural sensitivity.

At least 25 sites per square mile are predicted here. Although all sites recorded are lithic sites, they represent nearly every facet of stone tool technology.

Native American Uses, Needs, and Sites

Few Native American resources are currently reported for this WSA. Two Chemehuevi-Serrano boundaries pass through the extreme western part of the WSA. This indicates that the area was probably used by both ethnic groups.

Scenic Quality

The study area has an overall scenic quality rating of "medium." It includes portions of five scenic quality polygons with ratings spanning the range from low to high. The outstanding scenic feature within the study area is the Granite Mountains. The Granite Mountains polygon rated high in landform and received high-medium scores for color, vegetation, and uniqueness.

General Recreation

There are four interpretive sites in the WSA. The Granite Mountains are in the transition zone between low desert species and high desert species and have over 240 plant species and a diverse fauna. Budweiser Spring, rated medium, is a good water source with riparian plants. Cottonwood Springs, unevaluated, has a good water supply and riparian vegetation. Willow Springs

Basin, unevaluated, has archaelogical sites and outstanding granitic exfoliations.

One teaching and research site is used eight or more times annually by pre-college, college, and university groups.

There are excellent floral displays in Granite Pass in wet years. Good floral display areas include the land between the Granite Mountains and the Kelso Dunes and the southeast-facing slopes between the mountains and I-40.

Rockhounding collection areas can be found at Black Ridge (chalcedony roses, jasper, perlite, onyx, chrysocolla), Bristol Mountains North (gold, silver, copper minerals), and Gold Coin mine (chrysocolla, agate, azurite).

There are two concentrated-use zones inside the WSA. One received 6,269 visitor use days in 1978 with use mostly in nature-oriented activities and shooting. The second zone received 3,037 visitor use days mostly in the form of sightseeing.

The WSA contains a Primitive Area and a Natural Environment Area.

Range Uses and Potential

This WSA contains a portion of the Granite Mountain Allotment and a small portion of the proposed expansion. The Granite/Providence Mountains Herd Management Area is also with the WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments were varied, referring to the ecological importance of the Granite Mountains, specific mining areas and access roads, recreational interests by rockhounding groups, and potential for minerals and energy. Changes were made where road and mining activities impacted potential wilderness values.

Study Phase

About three-quarters of the 40 letters addressing the wilderness qualities of WSA 256 favored multiple-use designation to further study as a wilderness area. Comments favoring multiple-use mentioned grazing, vehicle recreation, energy, and mining concerns. Within the area are 4,483 acreas leased for grazing. Vehicle-related recreation includes four-wheel drive vehicle travel, driving for pleasure, trail riding on motorcycles, photography, hunting, camping, dune-running, and picnicking. The extreme heat of the area requires a vehicle for extended access, and is best for hunting, mining, grazing, and rockhounding. Rockhounds mentioned the western end of the area particularly and listed agates, jasper, sagenite, obsidian, chalcedony, calcite crystals, geodes, banded onyx, and other gems found here. Mining concerns cited the potential for iron, copper, titanium, boron, phosphates, various salts, limestone, building stone, sand, and gravel. Some existing

mines require access which would be precluded under WSA designation. The area has too much private land which, if excluded, leaves a polygon with less than 5,000 contiguous acres. Some comments addressed the geothermal potential of the area, particularly in the western half of the area. Access is needed for utility company maintenance, ranchers, and recreationists. Budweiser Wash was mentioned for access twice. Sights and sounds which make the area inappropriate for wilderness or which require boundary adjustments of 1 mile or more include powerlines, I-40, low-flying aircraft, and vehicles using trails and ways for the purposes mentioned above. The former use of the area as a motorcycle race area in the 1960's was mentioned.

Supporters of wilderness study designation mentioned the destructive results of motorized vehicle use on the desert, and scientific, ecological, educational, and geological features which should be protected. The scenic qualities of the Granite Mountains and adjoining bajada, the spacious vistas and varied vegetation were mentioned, including the nut-pine forests, yucca-cholla association, Pinus monophylla, Juniperus, and rare Penstemon stephensii. Sheep Corral is called "the classic example of a pediment," useful for study. Extensive aboriginal evidence, bighorn sheep, and opportunities for hiking, nature study, and related recreation are features which make this an outstanding wilderness area. Recommendations to close ways to Sheep Corral and Budweiser Spring to protect values in these areas were made. One comment discussed designating the entire WSA 256 as a Wilderness Study Area.

Numerous comments were received in response to the workbook. Recommendations included a 100-foot easement for Southern California Gas Company, joint BLM/University of California management, and designation of the site for "non-wilderness" activities. Other comments state that there is too much private land in the WSA for wilderness consideration. Opposite opinions recommended boundary adjustment and expansion to enhance wilderness.

Draft Plan Alternatives

A variety of public comments specific to WSA 256 was received in response to the Draft Desert Plan Alternatives. One indicated agreement with the Protection Alternative, another expressed concurrence with the Balanced Alternative, while a third favored wilderness with inproved vehicle access. Another called for recommending more land as suitable for wilderness than was recommended in the Protection Alternative. In addition, one stated that the exploration for and development of oil, gas, and geothermal resources, under the No Action Alternatives, were the best uses for the study area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The eastern portion of the Bristol/Granite Mountains WSA (256) is recommended as suitable for wilderness designation. The relatively high ranking (30) was a factor in this decision. The WSA did not possess other qualities identified as desert-wide wilderness objectives.

Recognizing the known and predicted occurrences of metals, in addition to the high natural, cultural, and recreation values, it was decided to place the western portion of the WSA into Class L. It was decided that the class guidelines would protect both the bighorn sheep and their habitat and the golden eagle and prairie falcon eyries and foraging areas. The many cultural sites scattered throughout the area would also be adequately protected.

IMPACT OF PROPOSED PLAN

The interior valley in the Coffin Springs area possesses extremely high values relative to opportunities for solitude. Use associated with the Class L designation could result in a loss of these values in this particular area.

The western end of the study area is recommended for Class M, which provides for mineral development, grazing improvements, and access on existing ways. These activities would have a moderately adverse impact on the wilderness and scenic values in the area, especially in the valley areas where there is little visual screening. However, the highest values are located in the Granite Mountains area, which is recommended for Class C.

WILDERNESS STUDY AREA 258

Lava Hills

General Description

The northern boundary of this area (24,500 acres)[1] is Interstate 40. The eastern boundary is a maintained road from Klondike to a gas pipeline maintenance road. The southern boundary is a combination of a graded road north of the railroad track, the railroad track line, and its maintenance road. One-third of this area is non-public land in north-south parallel strips. There are mining claims in the west-central portion of study area. This WSA contains 50 percent hills, 25 percent alluvial fans, 13 percent dissected fans, and 12 percent highly dissected fans. Most soils in this WSA are highly sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

Most of this area is a combination of gradually sloping bajadas and eroded, steep, and rounded hills. There are shallow and major washes throughout. The predominant vegetation is creosote, with scattered portions of desert shrub and few native grass species. Soil color varies from light tan and grey to reddish brown. This area also contains the volcanic reddish-brown Lava Hills, which are isolated within the wide sloping bajadas on the west and east.

Natural Condition

This area remains in its primitive undeveloped state. Man's works are substantially unnoticeable, and it is primarily affected by natural forces. No roads were observed in this area. There was a way east of Lava Hills and one in the southwest portion, but both ways were revegetating naturally. A patented mine in Section 5 (T. 6 N., R. 10 E.) has been excluded. A block of approximately 5 square miles southwest of Black Ridge has been excluded from further wilderness consideration due to bulldozer scars.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Outstanding opportunities for solitude exist in portions of this area, especially in the Lava Hills. In addition, the distance from the base of mountains across the bajada to the Old National Trails Highway actually

[1]Portions of T. 6 N., Rs. 9, 10, and 11 E.; T. 7 N., Rs. 10 and 11 E.; and T. 8 N., Rs. 10 and 11 E., SBM.

enhances the feeling of solitude and freedom of movement. The ruggedness of the mountains also tends to topographically screen visitors from one another. Primitive and unconfined recreation opportunities are also outstanding because of the area's large size and diversity of terrain.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 87 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey.

This WSA has possible potential for metals, geothermal energy, and cinders. Twenty-eight claims are recorded. No claims are recorded on a BLM computer printout of December, 1979, representing an estimated 25 percent of all claims recorded with BLM.

Vegetation

No unusual plant assemblages occur within WSA 258. Vegetation consists mostly of creosote bush scrub. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

Approximately 20 square miles of the Bristol Mountains in this WSA are located in the transient range of the desert bighorn sheep. This is approximately 5 percent of the total transient bighorn range in the Bristol Mountains. Moderate populations (20 to 50 animals per square mile) of desert tortoise occur over about 17 square miles of the area. There is one known prairie falcon eyrie in the area; the entire area provides prairie falcon foraging habitat.

Cultural Resources

Approximately 2 square miles of known high sensitivity are located in the northeastern portion of the proposed WSA. Sites in this area are composed primarily of lithic material. The railroad siding of Trojan can be found in the southern portion of the WSA. This area of high sensitivity covers one half of a square mile. The remainder of the area has not been systematically surveyed; additional sites can be expected.

Native American Uses, Needs, and Sites

Ten Native American resources are currently reported for this WSA. Two of the Chemehuevi-Serrano boundaries pass through the central part of the WSA. This indicates that the area was probably used by both ethnic groups.

Scenic Quality

The study area has a scenic quality rating of "low." It is dominated by the Lava Hills, which received low scores for landform, vegetation, and uniqueness and a medium score for color.

General Recreation

There is one interpretive site, Bagdad obsidian field, with a low rating. There is an excellent rockhounding opportunity at Black Ridge for chalcedony roses, jasper, perlite, onyx, and chrysocolla.

Range Uses and Potential

A portion of the proposed Ludlow Allotment is in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Most comments supported the findings in the narrative. Some indicated mineral and energy potential. Changes reflect specific information received on roads and man-made features.

Study Phase

Most of the 40 comments favored multiple-use designation of this area. Ways into the area are used by the gas company, rockhounds, and campers. Prospecting, four-wheel driving, hiking, picnicking, photography, trail riding, driving for pleasure, dunebuggy riding, land sailing, motorcycling, and rock climbing are many recreational values mentioned. Nullifying wilderness qualities are spring fences, grazing impacts, powerlines, corrals, I-40, aircraft, and vehicles using ways and roads. Geothermal potential exists in the wilderness area, particularly in the western half. The area has less than 5,000 public land acres and does not fulfill FLPMA (603) provisions. The area includes 4,483 acres leased for grazing. Rockhounds seek several minerals here, particularly in the western end. Restricting their access is unfair. Mining access is imperative to locate and mine iron, copper, titanium, boron, phosphates, various salts, limestone, building stone, sands, and gravel. The area is a former motorcycle race area. Deletion from the WSA of all the area except the Granite Mountains was suggested by some.

Archaeological and ecological resources require the protection of wilderness, according to many comments. Yucca-cholla association, pinyon pine, junipers,

and rare Penstemon stephensii are part of the variety of flora and fauna here. Bighorn sheep habitat exists. Archaeological values are extremely high; village sites, pictographs, and petroglyphs warrant protection. Motorized vehicle damage of delicate values requires that the vast bajada adjoining the Granites be protected by wilderness designation and buffer the range's ecosystem. Scientific and educational values are high; hiking, backpacking, nature study, and photography opportunities are excellent. A letter about a Boy Scout hike to the peak of the Granites described fine camping qualities there.

Numerous comments were received in response to the workbook. Among the opinions stated were that military manuevers destroy surrounding wilderness; the area is not wilderness quality because it lacks water and access. Other opinions noted that this is a prime multiple-use and rockhounding area.

Draft Plan Alternatives

The following public comments specific to WSA 258 were received in response to the Draft Desert Plan Alternatives. One indicated complete agreement with the Balanced Alternative, while another stated that exploration for and development of oil, gas, and geothermal resources, under the No Action Alternative, were the best uses of the study area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Lava Hills Wilderness Study Area (258) is recommended as nonsuitable for wilderness designation. This Wilderness Study Area rated low in relative wilderness quality and did not possess any of the qualities identified in the desert-wide wilderness objectives.

The area has potential for mineral and geothermal development. An excellent rockhound area is located at Black Ridge. The WSA also coincides with a portion of the proposed Ludlow grazing allotment.

The decision for a nonsuitability recommendation was based on low resource values and alternative protective classes. The area is recommended for Class L designation. This will protect the bighorn sheep range, desert tortoise population, and the one known prairie falcon eyrie and foraging area.

IMPACT OF PROPOSED PLAN

The limited use associated with the Class L designation would have only slightly adverse impacts on wilderness values, which rated fair, and the scenic values, which rated low.

WILDERNESS STUDY AREA 258A

South Bristol Mountains

GENERAL DESCRIPTION

The area (31,370 acres)[1], which includes the southern terminus of the Bristol Mountains, is bordered on the east by the Kelbaker Road and its associated spur, on the north by a gas pipeline right of way, on the west by a maintained road from Bagdad to the northern pipeline, and on the south by another gas pipeline right of way. Approximately 25 to 35 percent of this area is non-public land running in parallel north-south strips of alternating sections. This WSA contains 35 percent alluvial fans, 30 percent hills, 20 percent dissected fans, and 15 percent sand-covered fans. Most soils in this WSA are highly sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

This area contains the southern terminus of the Bristol Mountains and the bajadas which border it on the west and east and, to a lesser degree, on the south. The mountains are steep and rugged and present a red-brown color contrasted by the lighter grey and whites of the gently sloping bajadas. Soil tends to be rocky throughout, with the exception of the sandy wash bottoms. Vegetation tends to be mixed desert shrubs (cresosote bush scrub, brittlebush) and rather widely spaced. Many animals are present. Vegetation in the washes shows little change, but is healthier in river beds than the surrounding areas.

Natural Condition

With the exception of the southeastern portion, and a road from Amboy to prospects in Section 17 (T. 6 N., R. 12 E.), this area's primitive, undeveloped state has been retained. Man's works are substantially unnoticeable, and it is primarily affected by natural forces. No roads penetrate this area. In the southeastern protion many mines are present, along with access roads. Many motorized vehicle scars are present on the southern hills and show erosion. All of these aspects have the effect of making this portion unsuitable because of permanent structures and the extent to which the area has been disturbed by man. This impacted portion was omitted from further wilderness consideration.

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[1]Portions of T. 6 N., Rs. 11, 12, and 13 E.; and T. 7 N., Rs. 11, 12, and 13 E., SBM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Outstanding opportunities for solitude exist throughout the northern portions. The distance from the base of the mountains across the bajada to the Old National Trails Highway actually enhances the feeling of solitude and freedom of movement. The ruggedness of the mountains tends to topographically screen visitions from one another. Primitive and unconfined recreation are well-suited to this area.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 117 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for limestone, gold, iron, geothermal energy, and uranium and thorium. No claims are recorded on the BLM printout.

Vegetation

No unusual plant assemblages occur within WSA 258A. Vegetation within the WSA consists mostly of creosote bush scrub. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

The Bristol Mountains provide 6 percent (22 square miles) of the total transient range for desert bighorn sheep in these mountains. Prairie falcons forage over about 14 square miles of the area. Low tortoise populations (20 to 50 animals per square mile) are found in this WSA.

Cultural Resources

Five square miles of known high sensitivity/significance are located in the northern portion of the proposed WSA. Sites throughout this regoion are predominantly lithic scatters and quarry locations. Although this area has not been systematically surveyed, a large number of sites can be predicted because of the presence of desert pavement.

Native American Uses, Needs, and Sites

Ten Native American resources are currently reported for this WSA. Two of the Chemehuevi-Serrano boundaries pass through the central part of the WSA. This indicates that the area was probably used by both ethnic groups.

Scenic Quality

The study area encompasses portions of three scenic quality polygons and has an overall "low" scenic quality. The South Bristol Mountains, which dominate the scenery, received medium scores for all key factors. Bagdad Valley, the other major polygon in the area, received low scores for all key factors.

General Recreation

No known recreation resources exist in this WSA.

Range Uses and Potential

A small portion of the Granite Mountain Allotment proposed extension is in the WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments expressed recreational interest and potential energy development, as well as the primitive recreational potential. Field evaluations on the ground and from the air revealed a prospecting road, but otherwise supported the original findings.

Study Phase

Of the 16 comments discussing WSA 258A, nine supported a multiple-use designation of the area. Two letters addressed geothermal potential of the area. One identified the southwest third and the northeast third as having potential. The other discussed the potential not only for development of the PGRA here, but also wind power, powerplant siting, and transmission line siting, which would all be constricted by wilderness designation and the uncertainty caused by the long process of designation. A representative of Twenty-Nine Palms Marine Corps Base said that WSAs near the base will (1) cause WSA qualities to be reduced by ground tremors, dust, and noise pollution from the base's activities and (2) restrict and possibly reduce effectiveness of training maneuvers. Mineralization of the area is mentioned; one comment suggested that if taxpaying miners are restricted from the area, then hikers, archaeologists, rockhounds -- everyone -- should be excluded. Vehicle access should be maintained for the utility company, rockhounds, and campers. Access for educational and scientific use to study the best preserved volcanic crater in California (location not identified) was urged.

Wilderness study designation was recommended by some for several features. An area of rugged, diverse terrain, it is one of the starkest areas of the desert. The northern and eastern parts of this WSA were praised for their special qualities. Protection against motorized vehicle scars was urged; one writer noted that some scars now present would heal if the area were designated.

Numerous comments were received in response to the workbook. The U.S. Navy commented that maneuvers in the area would destroy wilderness quality. Other opinions expressed a desire to exclude the lower elevations from the wilderness status. One comment favored wilderness stance for this area.

Draft Plan Alternatives

The following public comments specific to WSA 258A were received in response to the Draft Desert Plan Alternatives. One indicated complete agreement with the Balanced Alternative, while another stated that exploration for and development of oil, gas, and geothermal resources, under the No Action Alternative, were the best uses of the study area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The South Bristol Mountains Wilderness Study Area (258) is recommended as nonsuitable for wilderness designation.

This Wilderness Study Area ranked low (117) in relative wilderness quality, and it did not possess any of the qualities identified in the desert-wide wilderness objectives.

The area has potential for mineral development, and a portion of the Granite Mountain grazing allotment proposed extension penetrates the WSA.

The nonsuitability recommendation was based on low resource values and alternative protective classes. The entire area is recommended for Class L designation. This will protect the bighorn sheep transient range, prairie falcon foraging area, and the tortoise populations while permitting mineral development and recreation access.

IMPACT OF PROPOSED PLAN

The limited use associated with the Class L designation would have only slightly adverse impacts on wilderness values, which rated poor overall, and the scenic values, which rated low.

WILDERNESS STUDY AREA 259

Marble Mountains

General Description

The western boundary of this area (38,220 acres)[1] is Kelbaker Road. The southern boundary is the interstate gas pipeline right of way paralleling Old National Trails Highway. The eastern border is the the Old National Trails Highway. The northern border is a wooden pole utility line road and a pipeline maintenance road. The area is 69 percent public lands with non-public lands in north-south strips of alternating sections. A considerable acreage in the northwestern area is possibly contaminated by unexploded military ordnance, a remnant from military maneuvers of World War II. This WSA contains 45 percent hills, 30 percent alluvial fans, 15 percent dissected fans, 5 percent highly dissected fans, and 5 percent sand-covered fans. Most soils in this WSA are highly sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

The area includes the Marble Mountains which run northwest to southeast with long alluvial fans on both sides. They are a narrow volcanic range of unique coloration. Alternating dark brown and light brown striations have been tilted by geologic processes and give a marbled appearance to the range. Through the center, several yellowish sandstone peaks with long talus slopes are prominent. Vegetation is very sparse on the mountain slopes but dense in the washes and on the very rocky alluvial fans with creosote bush scrub.

Natural Condition

Permanent structures are apparent in the southwestern alluvial fan area. There is an active mine, with dwelling, at Castle mine near the center of the mountain range. The road to this site runs north-northeast from the southwest corner, 6 miles into the area. Numerous assessment holes and general motorized vehicle scarring dominate the landscape between the Marble Mountains and Bristol Mountains on the alluvial formation in the southwestern region. Along the southern face of the Marble Mountains, north of Chambless, extensive mining activity significantly alters the primeval character of this land. One very large, patented iron mine (The Iron Hat Mine) is a major scar and has been excluded. Several smaller mining operations are scattered near the area boundary at Cadiz Summit. Roads and ways used as access to these sites dominate the area north of Chambless. Several dwellings are located in

[1]Portions of T. 6 N., Rs. 12, 13, 14, and 15 E.; and T. 7 N., Rs. 12, 13, 14, and 15 E., SBM.

this area as is a small network of streets. The northern alluvium and the Marble Mountains north and northwest of the Iron Hat mine are areas where the earth and its community of life are untrammeled by man. The primeval character and influence are apparent in this portion. The boundaries of the Wilderness Study Area are common with the roadless area boundaries from Cadiz Summit to the northern utility line border and west to the intersection of the north pipeline road with Kelbaker Road. From this point, the border proceeds southeast to exclude the impacted lowlands to Castle Mine Road, which is also excluded. The boundary proceeds further southeast to the Iron Hat mine, which is excluded, and follows the mountain ridgeline further southeast to Cadiz Summit. The Wilderness Study Area generally appears to have been affected primarily by natural forces with man's imprint substantially unnoticeable.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The Marble Mountains offer isolation in the steep canyons and broad views of the surrounding, sparsely populated landscape. These factors provide seclusion and offer outstanding opportunities for solitude within the Wilderness Study Area. The varied rock structures in these mountains provide challenging terrain for a variety of types of primitive recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 135 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has known potential for gold, limestone, garnet, and iron and possible potential for other metals, uranium, and bentonite. Three claims are recorded.

Vegetation

No unusual plant assemblages occur within WSA 259. Vegetation consists mostly of creosote bush scrub. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

The Marble Mountains provide permanent (15 square miles) and seasonal (9 square miles) range for desert bighorn sheep. Approximately 80 percent of the total range of this bighorn herd, estimated at 20 individuals, is located in WSA 259. This includes 90 percent of the permanent range and 65 percent of the seasonal range. Prairie falcons forage over about 60 square miles of the area.

Cultural Resources

Approximately 2 square miles of known high sensitivity/significance are located in the WSA. The only known sites in this area are related to historic mining activities; however, the region has not been systematically surveyed.

Native American Uses, Needs, and Sites

Few specific resources have been identified within this WSA. The area is within the traditional use area of the Chemehuevi. A concentration of potential sensitive resources is anticipated within the Marble Mountains.

Scenic Quality

The study area has an overall scenic quality rating of "medium." It encompasses portions of four scenic quality polygons with ratings spanning the range from low to high scenic quality. The Marble Mountains, which dominate the scenery in the study area, received a high score for color, high-medium scores for landform and uniqueness, and a low score for vegetation, rating high for overall scenic quality.

General Recreation

There is one teaching and research area in the WSA receiving at least eight visits annually from pre-college, college, and university classes.

Range Uses and Potential

A small portion of the Granite Mountains Allotment proposed extension is in the WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments which referred to inventory criteria supported the findings.

Study Phase

Ten of 15 comments on WSA 259 favored a multiple-use designation for this area. Within the area, 561 acres are leased for grazing. Mineralization

exists, including gold, silver, and iron deposits. Marble and building stone are also mentioned. Geothermal potential is here, especially in the western third and eastern third of the WSA. Vehicle access is needed to study the trilobites contained in the shale beds located here, for rockhounders who especially use the southern end of the Marble Mountains, and for railroad maintenance access. Private land patterns make this area inappropriate for a WSA, by breaking the area into four separate sections which do not individually contain 5,000 contiguous acres. Sight-and-sound intrusions include those from the bordering railroad, vehicle traffic on border roads, the pipeline, and air traffic. Boundary adjustments of up to 2-1/2 miles away from these intrusions on the ground were recommended.

Supporters of wilderness designation commonly mentioned the high scenic value. Vistas of Cadiz Valley are magnificent and provide excellent feelings of vastness and solitude. The variety of different colored and structured mountains deserves protection. The area is close enough to paved roads to provide access to visitors. The southern boundary should be expanded to State Route 66 to take advantage of the viewpoints available from the south.

One comment was received in response to the workbook. Southern California Gas Company recommended a 100-foot easement on all support roads to insure that wilderness areas are not violated during maintenance operations.

Draft Plan Alternatives

No public comments specific to WSA 259 were received in response to the Draft Desert Plan Alternatives.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Marble Mountains Wilderness Study Area (259) is recommended as nonsuitable for wilderness designation.

The area ranked very low (135) in terms of its relative wilderness values and did not exhibit any of the qualities identified as desert-wide wilderness opportunities. The study area has known potential for limestone and iron and possible potential for other minerals.

It was decided that the mineral resources values within the area were of greater significance than the wilderness values. The area was designated as Class L. This class will protect the small herd of bighorn sheep and the prairie falcon foraging area, while allowing limited access for mineral exploration and development. The highly sensitive cultural resource area and anticipated concentration of sensitive Native American values are also protected.

IMPACT OF PROPOSED PLAN

The limited use associated with the Class L designation would have only slightly adverse impacts on wilderness values, which rated poor overall, and on scenic values, which rated medium.

WILDERNESS STUDY AREA 260

Clipper Mountains

GENERAL DESCRIPTION

The area (54,790 acres)[1] is bordered on the north by Interstate 40. The eastern border is Essex Road and a wooden pole utility line maintenance road. The southern boundary is a gas pipeline right of way and associated maintenance road and the western boundary is a wooden pole line maintenance road.

Approximately 35 to 45 percent of this area is non-public land in a uniform strip pattern that extends in a north-south direction. A considerable acreage in the northern and eastern portions of the area is possibly contaminated by unexploded military ordnance, a remnant from military maneuvers of World War II. This WSA contains 35 percent alluvial fans, 20 percent mountains, 20 percent dissected fans, 15 percent hills, 5 percent highly dissected fans, and 5 percent plateaus. Most soils in this WSA are highly sensitive to surface disturbance.

WILDERNESS QUALITY

Description of Environment

The area boundaries encompass the Clipper Mountains, the surrounding bajada associated with Fenner Valley to the east, Clipper Valley to the north and west, and a small group of hills at the western end called the Middle Hills. The mountains are oriented generally east-west and rise to 4,604 feet at their highest point. Elevations of the surrounding bajadas range from 2,000 to 2,400 feet. The low ridges at the southern end are pinkish in color and are capped with volcanic dikes and rocky spires. The most prominent ridge lies in the north-central region and is a large mesa with alternating yellow and dark brown horizontal striations. Jagged yellowish buttes and spires are scattered throughout the area south of this ridge. The broad valley portions of this area support a dense creosote scrub plant community. The rocky hillsides and steeper slopes are very sparsely vegetated, while higher northern exposures support Mojave yucca, cacti, and low desert shrubs. Some interior washes support stands of mesquite and smoke trees.

Natural Condition

Man-made structures are evident in portions of the roadless area. Scattered prospects in the northern half are apparently abandoned. The forces of

[1]Portions of T. 7 N., 13, 14, 15,, and 16 E.; and T. 8 N., Rs. 14, 15 and 16 E., SBM.

nature seem to be reclaiming the formerly maintained access routes to these sites at Hummingbird Spring and Chuckwalla Spring. These structures are insignificant in their effect upon the naturalness of the landscape and are weld-screened and have not been excluded. Along the southern border, maintained mining access roads intrude into the area to the Tom Reed mine, Bonanza Spring, and a third mining site 2-1/2 miles west of Bonanza Spring. Several dwellings are located just south of Bonanza Spring, and impacts from this human habitation alter the primeval character and influence of the landscape. The mining area west of Bonanza Spring contains trailers and several mining sites as well. These areas were omitted from the WSA. Though only one short road leads into the area, a rehabilitation process would take many years and perhaps never restore this immediate vicinity to its natural condition; therefore, this small portion has been excluded from the remaining portion that does contain wilderness values.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The topography of this area consists of high, flat-topped ridges, low rocky buttes, and scattered hills, which provide screening from other visitors to this area. This variety in the terrain also offers varying degrees of challenge for a diversity of recreational opportunities. By providing isolation and geological diversity, the area offers outstanding opportunities for solitude, including outstanding opportunities for primitive and unconfined types of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 94 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for metals (gold, lead, silver, iron, tungsten), uranium, limestone, and pumice. No claims are recorded.

Vegetation

No unusual plant assemblages occur within WSA 260. Vegetation consists mostly of creosote bush scrub. No rare plant species are known to occur within this WSA.

Wildlife

The creosote bush-dotted valleys contain 15 square miles of desert tortoise habitat. Desert tortoise populations over this area have estimated densities of 20 to 50 animals per square mile. This is a portion of one of four core tortoise populations in California.

The Clipper Mountains provide habitat for several important wildlife species. An abundance of springs located here is a critical source of water to the Clipper Mountains desert bighorn sheep herd, estimated at 12 individuals. Fifteen square miles of bighorn sheep permanent range and 22 square miles of seasonal range used by this population is located in WSA 260. Mountains, peaks, and slopes also contain several raptor nesting areas, including three prairie falcon eyies and one golden eagle eyrie. Approximately 70 square miles of this WSA are used for foraging by both raptor species. The western pipistrelle bat, of spotty distribution in the Mojave Desert, has also been recorded from the Clipper Mountains.

Cultural Resources

Several areas of known sensitivity/significance are located within this WSA.

Native American Uses, Needs, and Sites

Few resources have been identified within this WSA. The Clipper Mountains have been traditionally occupied by the Chemehuevi. Some informants have indicated that this region is a portion of a larger bighorn and deer hunting territory employed by the Chemehuevi. Occasional use of the area continues (Edd, 1980).

Scenic Quality

This area incorporates three scenic quality polygons which ranged from high to low in ratings. The central portion has a variable landform that can be divided into steep, jagged "high country" surrounded by more rounded areas. The high area displays rich color stratification with sparse vegetation. The lower surrounding area is rich in vegetation, both in varieties and numbers, but lacks surface color. Vegetation includes cacti, riparian species, wash types, creosote, and mixed desert shrub. Few intrusions exist, mostly old mines, but their impacts are local. Vegetation and color rated above average.

General Recreation

There is one low-rated interpretive site known as the Clipper Mountain Volcanics. These remote, rugged volcanics have beautiful colors but were heavily impacted by Operation Desert Strike and by artillery shelling during World War II training maneuvers.

There are good hunting opportunities for dove and quail.

Range Uses and Potential

This WSA contains a portion of the Granite Mountain Allotment and a small portion of the proposed expansion. A portion of the Colton Hills Allotment is also in the WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Some of the comments received supported the findings in the narrative. Others indicated the mineral potential should be considered.

Study Phase

Three comments favored wilderness designation of WSA 260; five opposed it. Those favoring wilderness noted: Clipper Mountains are a striking scenic feature, resembling an old clipper ship from a distance. Designation would help maintain the scenic veiwshed of freeway drivers. The Goldhammer mine area is historic and deserves preservation. The area is an outstanding wildlife sanctuary, including the healthy desert tortoise population in Clipper Valley. Bonanza Spring should be included in the Wilderness Study Area.

Those opposing wilderness indicated several items. A future microwave relay station is necessary in this area (location referenced in file). The Gold Reef mine may have mineral extensions into the Wilderness Study Area; the district has potential for tungsten, gold, and silver operations. Oil, gas, and geothermal opportunities should be investigated, especially in the western and eastern thirds. Railroad officials mentioned the need for access to conduct drainage surveys, make flood studies, and maintain dikes.

Several comments were received in response to the workbook. General comments suggested boundary adjustment and/or elimination of the area from wilderness consideration. The Southern California Gas Company suggested 100-foot easements along support roads for maintenance of utilities.

Draft Plan Alternatives

No public comments specific to WSA 260 were received in response to the Draft Desert Plan Alternatives.

SUMMARY OF RATIONALE FOR PROPOSED PLAN

The Clipper Mountains Wilderness Study Area (260) is recommended as nonsuitable for wilderness designation.

This study area was ranked in the bottom half (94) of all WSAs considered and did not possess the qualities identified as desert-wide wilderness opportunities. The area has been identified as having potential for metals, uranium, limestone, and pumice. It supports one grazing allotment and is

considered to possess good hunting potential. It was decided that the value of the competing resources exceeded that of the Wilderness Study Area.

The area supports desert tortoises and a small bighorn sheep population and their associated habitats. Also, several areas of known cultural resources are located throughout. To protect these values the area was recommended for Class L, which will allow access for mineral development and recreation.

IMPACT OF PROPOSED PLAN

The Class L designation allows for controlled exploration and development of minerals and for vehicle access on designated ways. Mineral development would have only slight adverse impact on wilderness and scenic values due to mitigation measures and the screening effect of the topography. Vehicle use of designated ways would impair opportunities for solitude.

WILDERNESS STUDY AREA 262

South Providence Mountains

GENERAL DESCRIPTION

The area (23,938 acres)[1] is bounded on the north by a high voltage transmission line and gas line right of way corridor with accompanying roads through Foshay Pass; on the east by a stock water tank access road, which is also used for access to the active Bighorn mine; on the south by an access road to the Bighorn mine; and on the west by the Kelbaker Road and access roads to Arroweed Springs. This area is predominantly public land with approximately 30 percent random blocks of non-public land. This WSA contains 30 percent mountains, 27 percent dissected fans, 15 percent hills, 15 percent alluvial fans, 10 percent pediments, and 3 percent highly dissected fans.

WILDERNESS QUALITY

Description of Environment

This area is dominated by the southern Providence Mountains. These rugged mountains have many secluded canyons and are accompanied by vast flat bajadas and valleys with many hidden washes. The southern most part of the Providence Mountains is composed of huge granitic boulders. The northern portion is composed of metamorphic and igneous rock formations with color striations and sheer cliffs. The valleys and bajadas are vegetated with mixed desert shrubs, creosote, yucca, cactus, and grasses. The higher elevations are vegetated with a mixed pinyon pine/juniper forest and shrubs.

Natural Condition

The area has generally retained its natural character. Man's works, which include some primitive ways leading to patented mining claims at Pine Tree Ranch, Sections 22 and 27 (T. 9 N., R. 13 E.), Sections 20 and 29 (T. 9 N., R. 14 E.), Section 6 (T. 9 N., R. 14 E.), and Section 12 (T. 9 N., R. 13 E.), are substantially unnoticeable because of the screening effect of the diverse terrain and the deteriorated nature of the features. The Wilderness Study Area boundary is common with the roadless area boundary and excludes several roads extending into the area.

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[1]Portions of T. 8 N., Rs. 13 and 14 E.; T. 9 N., Rs. 13 and 14 E.; and T. 10 N., Rs. 13 and 14 E., SBM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The large size and varied terrain, with its many secluded canyons and hidden washes, provide outstanding opportunities for solitude. The area also possesses many outstanding opportunities for an unconfined and primitive type of recreation. Varied terrain features, such as large rolling valleys and bajadas and the Providence Mountains with sheer cliffs, secluded canyons, varied rock formations, and available spring water, provide abundant challenging opportunities for unconfined and primitive types of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 85 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for metals including gold, silver, lead, and copper and includes three major past producers. There is also potential for fluorite, barite, and uranium. Nine unpatented claims are recorded.

Vegetation

The Providence Mountains are contained within this WSA, and they support several calciphyte communities on the limestone outcroppings within the mountain range. Because of the steep elevational/topographic gradient within the WSA, vegetation varies from creosote bush scrub to blackbrush scrub to pinyon-juniper woodland.

Most of the sensitive plant species within WSA 262 are limestone endemics and include such species as Astragalus cimae var. cimae, Eriogonum heermannii var. floccosum, Fendlerella utahensis, Penstemon calcareus, and P. stephensii. An additional non-calciphyte sensitive species (Monardella robisonii) is present near Granite Pass. This plant is probably not threatened by livestock grazing because of its growth habit as a saxicole inhabiting the crevices and cracks of boulders where cattle seldom graze.

Wildlife

Wildlife values are dominated by 12 square miles of bighorn sheep permanent range and 18 square miles of seasonal range. This is part of the Providence Mountains bighorn sheep herd, currently estimated at 50 individuals. Approximately 25 percent of the total range of this herd, including 30 percent of its permanent range and 20 percent of its seasonal range, is located in WSA 262.

Also included in this area are 50 square miles of golden eagle foraging habitat and one eyrie, 6 square miles of Bendire's thrasher habitat, one site of the California myotis, a 25-square-mile mule deer concentration area, and 14 important spring sites in the Providence Mountains.

Cultural Resources

Four areas of cultural resources sensitivity/significance are located within this proposed WSA.

Native American Uses, Needs, and Sites

No Native American resources have been documented within this WSA. Traditionally this area was used by the Chemehuevi, Mohave, and Panamint Shoshone; this use has continued to the present day in the general area. Potential resources can be predicted for the Providence Mountains and foothills.

Scenic Quality

Two scenic quality polygons are incorporated in this study area. The Providence Mountains area was rated high, based on terrain diversity and unique vegetation. The western edge is the Cima-Kelso edge zone which is primarily a linear valley bottom. Some variety of vegetation exists in the polygon and includes Joshua tree, some cactus, Mojave yucca, creosote, and mixed desert shrub. Intrusions in the area have some negative effect on the scenery, but overall the rating is "high."

General Recreation

There is one teaching and research area receiving at least eight visits annually from pre-college, college, and university classes. The WSA is bordered by an excellent floral area on the western side that includes the Kelbaker Road. There are excellent hunting opportunities for deer, dove, chukar, and quail. There are good rockhounding opportunities at the Bighorn mine area and fair opportunities at the Quail Spring area. The WSA is part of a Natural Environment Area. There is excellent birdwatching in 50 percent of the Providence Mountains.

Range Uses and Potential

This WSA contains a portion of the Granite Mountains Allotment and a portion of the Colton Hills Allotment. The Providence Mountains Herd Management Area is partially within the WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Most of the public comments supported the findings. Some comments identified roads and impacts related to mining and grazing activities. Roads which were field validated have been added to the map. Comments dealing with mineral potential have been addressed during the study phase.

Study Phase

All but seven of the 39 comments discussing WSA 262 did not favor wilderness designation; access for vehicle-related recreation was the most common objection to a WSA. This includes hiking, hunting, camping, horse riding, nature study, rockhounding, painting, photography, four-wheel driving, and trail riding; in general a "good area." Road access is also urged for prospecting, range and wildlife maintenance, private land entry, maintenance of a telephone microwave relay tower, and a mine operation. According to one comment, 1,903 acres are leased for grazing. Mineral potential exists for gold, silver, and iron, as evidenced by the presence of the Vulcan and Bighorn mines. There are extensive private land holdings in the eastern two thirds. Sight-and-sound intrusions from both within and outside the area include: eight bird guzzlers, hunters, Mitchell Cavern tourists, motorized vehicle uses, transmission lines, roads, bordering mines, developed water sources, and the microwave relay tower. A boundary adjustment of a 2-1/2-mile shrinkage from bordering roads and transmission lines is urged. A boundary adjustment was recommended to include only the area bordering Mitchell Caverns State Park over the mountain to the Vulcan Mine Road; there was also a supporting list of flora and fauna within that area.

Letters in support of the entire WSA being included for wilderness mention wildlife habitats and opportunities for primitive recreation. The designation of the area would combine the Granite Mountains and the southern part of the Providence Mountains. Destructive potential of motorized vehicle use was described. The area includes cave exploration and rock climbing opportunities. Springs make hiking feasible and support wildlife, including bighorn sheep.

Several comments were received in response to the workbook. Opinions strongly recommended that at least a one-half mile buffer zone around all mining claims and along each side of all roads be excluded from the proposed study area, because it is frequently necessary to borrow construction materials along road routes in order to make repairs after flash floods.

Draft Plan Alternatives

A variety of public comments specific to WSA 262 was received in response to the Draft Desert Plan Alternatives. One indicated complete agreement with the Protection Alternative, another concurred with the Balanced Alternative's recommendations, while a third insisted that the entire study area be combined with WSAs 263 and 264 in being recommended as suitable for wilderness under the Protection Alternative. Another called for recommending more nonmountainous terrain as suitable for wilderness under the Balanced Alternative. One commenter insisted that the use of existing roads and ways should continue within wilderness areas.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

A major portion (approximately 60 percent) of the South Providence Mountains Wilderness Study Area (262) is recommended as suitable for wilderness designation.

The study area possesses both known and potential mineral values and includes at least three mines identified as past producers. The area also supports a variety of recreational activities and parts of two grazing allotments.

Although the area ranked relatively low, it was decided that, for that portion of the WSA recommended as suitable, wilderness designation was the highest and best use.

The eastern portion of the WSA was recommended for Class L. Competing resource values in this area exceeded those of wilderness. This designation would provide access for mineral exploration and development and permit limited motorized vehicle oriented recreation activities. The area contains sensitive plant species, wildlife, areas of cultural resource sensitivity/ significance, and Native American values. The Class L designation would provide a degree of protection for all of these values.

IMPACT OF PROPOSED PLAN

The Class L portion of the unit would allow for grazing developments. These developments would create adverse local impacts, but would have little substantial overall impact on the wilderness and scenic values of the study area. The highest values of this area occur within the Class C portion of the study area.

WILDERNESS STUDY AREA 263

Providence Mountains

GENERAL DESCRIPTION

The roadless area (61,260 acres)[1] is bounded on the north by a mining access road through Macedonia Canyon. On the northeast it is bounded by the Wildhorse Canyon Road southeast to a windmill in Section 17 (T. 11 N., R. 15 E.) and a short dirt road, from the windmill southeast to elevation 3,993. On the east the area is bounded by the Black Canyon Road south to Section 20 (T. 10 N., R 15 E.). On the south the area is bounded by a combination of a dirt road from Section 20 southwest to Section 19 (T. 10 N., R. 15 E.), a dirt road running northwest to the 7IL Ranch, a dirt road northwest to the Bonanza King Well and southeast to a waterline maintenance road through Sections 34 and 33 (T. 11 N., R. 14 E.) and Section 2 (T. 11 N., R. 14 E.), the water line maintenance south to the utility line right of way, a major powerline right of way west to the intersection of the Vulcan Mine Road in Section 32 (T. 10 N., R. 14 E.), and the Vulcan Mine Road northwest to the western boundary. The western boundary is Kelbaker Road and the Union Pacific Railroad.

The area consists mostly of public land. Non-public lands are scattered and account for less than 20 percent of the roadless area. The southwestern portion of Section 18, T. 11 N., R. 15 E., was withdrawn from entry by Public Land Order 5224. There are a number of recorded mining claims throughout the study area. This WSA contains 25 percent hills, 25 percent alluvial fans, 20 percent mountains, 18 percent dissected fans, 10 percent plateaus, and 2 percent highly dissected fans.

WILDERNESS QUALITY

Description of Environment

The Providence Mountains vary in landform from limestone cliffs and caverns to rhyolitic crags and peaks. Upper elevations are vegetated with a pinyon-juniper plant community while, at the lower elevations, yucca, cactus, and mixed desert shrubs dominate. Other landforms in the roadless area include the volcanically originated Wildhorse Mesa, a large flat-topped landform composed of numerous layers of black volcanic rock, as well as broad, sweeping bajadas and valleys. Diverse cactus gardens exist on the high portions of the bajadas, while the lower portions and the valleys have Mojave yucca and mixed desert shrub plant cover. Color variety in the area is a

[1]Portions of T. 10 N., Rs. 13 and 14 E.; T. 11 N., Rs. 12, 13, 14, and 15 E.; T. 12 N., Rs. 13 and 14 E.; and T. 13 N., R. 14 E., SBM.

result of the diverse rock types (reddish rhyolitic crags, grey limestone cliffs, and black lava flows) and the variety of vegetation.

Natural Condition

Boundary adjustments have been made to exclude roads and areas that have lost their natural character due to man's impact. A network of mining and grazing roads has been excluded in the southeastern corner of the roadless area. This excluded area is defined by: (1) the patented mining claims and mining operations in Section 25 (T. 10 N., R. 13 E.), at the Vulcan mine; (2) a line north of Foshay Pass, through Sections 31 and 29 (T. 10 N., R. 14 E.); (3) a line running up the western side of Sections 28, 21, 16, and 9 (T. 10 N., R. 14 E.); (4) a line running on the northern side of Section 9 east to adjacent Section 3; (5) a line up the west side and over the north side of this same section to the southern corner of its northern Section 33 (T. 11 N., R. 14 E.); (6) a line up the western side of Section 33; (7) and the line west along the top of Section 33 to the Silver King Mine Road and along the eastern edge of the road to the roadless area boundary. This large exclusion includes the Bonanza and Silver King mines, the Mitchell Caverns, Mexican Mine patented mining claims and associated road, and numerous ways. Other exclusions in the area include: (1) 71L Ranch complex; (2) the road from the 71L Ranch up Beecher Canyon to a windmill in Section 27 (T. 11 N., R. 14 E.); (3) the road from the 71L Ranch up Barber Canyon to another windmill in Section 27; (4) the road to Bearclaw Well in Sections 7 and 18 (T. 10 N., R. 15 E.); (5) the patented mining claims in Section 32 (T. 11 N., R. 15 E.) along the eastern border; (6) the road to two windmills in Sections 11 and 12 (T. 11 N., R. 14 E.); (7) the Macedonia Springs and Columbia mine area along the northern boundary in the northeastern portions of Section 5, the northern half of Section 4, and SW1/4NW1/4 Section 3, all in T. 11 N., R. 14 E., for houses, mining operations, and associated scars, roads, and ways; (8) the road up Globe Canyon to the Globe mine in Section 9 (T. 11 N., R. 14 E.) and past to Summit Springs; (9) Kelso-Cima Road and the way that parallels it leading to an abandoned mine; (10) the patented mining claims in Section 25 (T. 11 N., R. 13 E.); (11) the area around Kelso, for buildings, water tanks, and railroad tracks, in Section 25 (T. 11 N., R. 12 E.); (12) the pipeline road from Kelso southeast to the patented mining claims in Section 11 (T. 10 N., R. 13 E.); and (13) the Rex mine area in the northern portion of Section 9 (T. 10 N., R. 13 E.), for mining operations, buildings, and associated scars and road. The remainder of the area has been affected primarily by natural forces with the works of man substantially unnoticeable.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Opportunities for both solitude and a primitive and unconfined type of recreation are outstanding because of the large size of the area, the wide variety of landforms, and the variety and density of vegetation in the area. Interior valleys, caves, canyons, and vast, spacious valleys provide excellent opportunities for escape, as well as providing a variety of primitive-type experiences. The presence of limestone caverns in the

Providence Mountains offers an excellent opportunity for spelunking -- a relatively unique experience in the California desert.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 9 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has 20 known occurrences of metals (gold, copper, uranium, lead, tungsten, silver) including some major past producers and three occurrences of limestone. There is potential for these commodities. About 175 unpatented and 5 patented claims are recorded.

Vegetation

The Providence Mountains are contained within this WSA, and they support several calciphyte communities on the limestone outcroppings within the mountain range. Because of the steep elevation/topographical gradient within the WSA, vegetation varies from creosote bush scrub to blackbush scrub to pinyon-juniper woodland. In addition, there are magnificent stands of large Yucca schidigera to the east of the Providence Mountains.

Most of the sensitive plant species within WSA 263 are limestone endemics and include such species as: Astragalus cimae var. cimae; Eriogonum heermannii var. floccosum; Fendlerella utahensis; Penstemon calcareus; and P. stephensii. In addition, a non-calciphyte sensitive species (Monardella robisonii) is present near Granite Pass. This plant is probably not threatened by livestock grazing because it grows in crevices and cracks of boulders where cattle seldom graze.

Wildlife

About one third of this WSA is permanent bighorn sheep range in the cental portion of the Providence Mountains. Another one third of the area (also in the Providence Mountains) is seasonal bighorn sheep range. This represents approximately 30 percent of the total range used by the Providence Mountains bighorn sheep herd, including 40 percent of the permanent range and 40 percent of the seasonal range.

About one tenth of the area (9 square miles) has desert tortoise populations of between 50 and 100 tortoises per square mile. Two prairie falcon eyries and two golden eagle eyries, as well as the associated foraging areas, occur in the area. Twenty-five springs provide water for concentrations of mule deer on about half of the area. Other wildlife of interest include the Panamint chipmunk, rock squirrel, Panamint kangaroo rat, Bendire's thrasher, and Mojave fringe-toed lizard.

Cultural Resources

Scattered throughout the proposed WSA are 31.5 square miles of very high sensitivity/significance, as well as 32 square miles of high sensitivity.

Native American Uses, Needs, and Sites

No Native American resources have been documented within this WSA, other than a site of Chemehuevi pictographs which lies just outside the northeastern edge. Other groups which traditionally used this area are the Mohave and Panamint Shoshone. Potential resources can be predicted for the Providence Mountains and foothills.

Range Uses and Potential

This WSA contains portions of the Granite Mountain Allotment and a portion of the Colton Hills Allotment. The Providence Mountains Herd Management Area is partially within this WSA.

Scenic Quality

The major portion of the area has a scenic quality rating of "high." The steep Providence Mountains emerge strikingly from their surrounding flat valleys as a prominent regional landmark. Deep canyons, cactus gardens, and upper ridges covered with pinyons and junipers can be found. The complex geologic composition of the mountains displays itself in interesting features. The variety of color found in the area is commensrate with the geologic and vegetative variety. Wildhorse Mesa, which is a high, flat-topped volcanic mesa, is an outstanding, individual scenic feature as well as a prominent regional landmark. Hundreds of small, natural caves in the lava add unusual interest to an already excellent scenic area.

General Recreation

There are two interpretive sites in the WSA. The Providence Mountains, rated high, have geologic, biologic, cultural and scenic resources of interest.

The western side of the WSA, where it borders on the Kelbaker Road, is known as an excellent floral display area. There are excellent rockhounding areas scattered throughout the WSA with a wide variety of specimens available. There are excellent hunting opportunities for deer, quail, dove, and chukar. There are two concentrated use zones on the edge of the WSA which take in Hole-in-the-Wall and the surrounding area. Hole-in-the-Wall received 13,773

visitor use days (VUDs) in 1978 with 27,546 annual VUDs per square mile. The other zone received 2,918 VUDs with nature-oriented activities dominating. There is a Natural Environment Area, a Primitive Area, and an important interpretive area -- Providence Mountains State Recreation Area -- within this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Many comments were received. The majority of those that addressed inventory criteria supported the proposed Wilderness Study Area boundaries. Roads and mining activity received further field checks and were excluded from the study area, where appropriate.

Study Phase

Area 263 generated 82 letters of comment, with 48 favoring multiple-use designation. Half of these were in the form of a checklist provided by a recreation organization which noted camping, backpacking, four-wheel driving, hiking, hunting, rockhounding, trail riding, and rock climbing as among activities in the area requiring vehicle access. The area is best for four-wheel driving, rockhounding, motorcycling, and family camping. Access should be open for mineral exploration and extraction in the Trojan mining district, as well as for recreation. Mineralization is indicated by the past history of mines; gold, silver, zinc, lead, copper, and iron can be expected in this area, as well as metallic sulfides and borates. Thirty percent of the desert is already withdrawn from mineral entry, and the wilderness designation process relies on a hasty mineral analysis. (An existing prospecting permit was noted at Sec. 16, T. 11 N., R. 14 E., SBM.) Within the area, 2,511 acres are leased for grazing, a well-established use. Sights and sounds nullifying wilderness qualities include aircraft, railroad to the west, lights of cities visible at night, tourist activities at Mitchell Caverns, powerline and pipe, with maintenance roads on south. One commenter described the railroad noise as amplified in the area because of steep grades of high bluffs. The area is one of the few areas where local residents enjoy good hunting.

Support for wilderness designation was enthusiastic, mentioning outstanding geological and ecological significance. An extremely varied flora and fauna exist here, including bobcats, bighorn sheep, prairie falcon, golden eagle, "great cactus bloom area," including mound cactus and old man cactus at higher elevations, pinyon, cedar, pygmy agave, and eight rare and endangered species (not identified). Other features include extensive evidence of aboriginal occupation, wide variety of scenery and terrain, petrified wood of ancient sequoia, fossils of invertebrates, historic "Old Mojave Trail," rockclimbing and cave exploring, and pinnacles of volcanic tufa. This "special blend in the desert" should be consolidated with WSAs 262, 264, 265, and 266 for a New York - Providence Mountains Wilderness Area, according to some comments. Other recommendations included management of the area as a primitive recreation area, bighorn habitat area, or part of an East Mojave National Park. Also mentioned were that the Desert Scenic Natural Trail is

nearby, Midhills campground should be eliminated or redesignated, and Wildhorse Canyon has been damaged by overgrazing.

Several comments were received in response to the workbook. Comments included recommendation for a boundary adjustment; a pro-wilderness stance (unique, geology, bighorn sheep habitat); and the suggestion that the Vulcan claim needs a half-mile buffer zone around it in wilderness.

Draft Plan Alternatives

A variety of public comments specific to WSA 263 was received in response to the Draft Desert Plan Alternatives. One indicated complete agreement with the Protection Alternative, another concurred with the Balanced Alternatives recommendations, while a third insisted that the entire study area should be combined with WSAs 262 and 264 in being recommended as suitable for wilderness under the Protection Alternative. Another called for recommending more nonmountainous terrain as suitable for wilderness under the Balanced Alternative. One commenter insisted that the use of existing roads and ways should continue within wilderness areas.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Providence Mountains Wilderness Study Area (263) is recommended as suitable for wilderness designation.

The area ranked high (9) in terms of its relative wilderness values and is located adjacent to the Providence Mountains State Recreation Area. There are known occurrences of metals and the area has a past history of mineral production. Also a popular area for general recreation, the area provides excellent hunting and rockhounding opportunities. Recognizing the conflicts between the mineral and recreation resources, it was decided that the wilderness values exceeded those of the competing resources. This designation would enhance the important natural, cultural, and Native American values and protect the scenic quality.

IMPACT OF PROPOSED PLAN

The Class C designation would positively impact wilderness values, which rated outstanding. The study area includes such outstanding and unique features as the rugged Providence Mountains ridgeline and Wild Horse Mesa. It offers a wide range of primitive recreation experiences from backpacking to spelunking. These and other values would be protected by the Class C designation.

WILDERNESS STUDY AREA 264

Mid Hills

GENERAL DESCRIPTION

This area (14,630 acres)[1] is comprised of Columbia Mountain and the southern portion of the Mid Hills. It is bounded on the north by the well-maintained Cedar Canyon Road, on the east by the Mid Hills Road and Wildhorse Canyon Road, on the south by the Macedonia Canyon Road, and on the west by the Cima Road. This area is predominantly public lands with approximately 10 percent random blocks of non-public lands. The northwestern portion of Section 13, T. 13 N., R. 14 E, has been withdrawn from public entry by Public Land Order 5224. There are recorded mining claims in the northern and eastern portions of the study area. This WSA contains 65 percent alluvial fans, 25 percent hills, 8 percent pediments, and 2 percent dissected fans.

WILDERNESS QUALTIY

Description of Environment

This generally appears to be a low, rolling, mountainous area with some exposed granite rock formations and boulders. The vegetation is dominated by a high desert sagebrush community with typical dry wash riparian vegetation. The upper elevations are covered with a pinyon pine-juniper forest type. The lower elevations appear light gray with mixed desert shrubs, cacti, yucca, and grass species.

Natural Condition

The area has retained its primeval character and generally appears to have been affected primarily by natural forces, with man's imprint substantially unnoticeable. The Chicken Spring, Mexican Water Spring, Bullock Spring, and access roads, all of which have been excluded, are substantially unnoticeable because of the screening by topographic variations, by vegetative cover, and by the large size of the area. The Wilderness Study Area boundaries exclude from further wilderness study the extreme northeast corner of the area, east of the way, from Section 36 (T. 13 N., R. 14 E.), south to elevation 5,517 in Section 13 (T. 12 N., R. 14 E.). This corner has been affected by man in the form of ways, the Mid Hills BLM Campground, a windmill, and a corral. Also excluded are the roads to Bullock, Mexican Water, and Chicken Springs. Access to these springs is from the Cedar Canyon Road.

[1]Portions of T. 12 N., R. 13 and 14 E., SBM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

This area contains outstanding opportunities for solitude. The varied terrain, with secluded canyons and spacious valleys, plus the vegetative screening by pinyon-juniper forest provides outstanding opportunities for solitude. There are many outstanding opportunities for unconfined and primitive type of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 93 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for metals and clay. Two unpatented claims are recorded.

Vegetation

No unusual plant assemblages occur within WSA 264. Vegetation consists mostly of creosote bush scrub. One rare plant species (Astragalus cimae var. cimae) is known to occur within this WSA. There is no evidence that this plant is threatened by livestock grazing. Its restriction to calcium-rich soils is the principal factor affecting its distribution. Since the genus Astragalus is largely toxic and in general these plants are considered to be invaders and weedy pests of range lands, it is possible that A. cimae var. cimae is favored by grazing. Close monitoring of populations and an analysis of this species for toxins could shed light on its status.

Wildlife

About 40 percent of this area is foraging habitat for prairie falcons, and 30 percent is foraged by golden eagles. One third (7 square miles) of the area has desert tortoise densities of 50 to 100 tortoises per square mile. Panamint chipmunk (2 square miles), rock squirrels (4 square miles), Swainson's hawks (3 square miles), and Bendire's thrasher (7 square miles) are also in the area. Nine springs provide water for mule deer concentrations in about 40 percent of the area.

Cultural Resources

Approximately 14 square miles of high sensitivity/significance are located within this proposed WSA, covering most of the area.

Native American Uses, Needs, and Sites

The New York Mountains, or Avi Wacca in Mohave, lie in the northern section of the WSA. This is an area of both sacred and mythological significance. Both Mohave and Chemehuevi traditionally used the New York Mountains for hunting (Knach, 1980, p. 17).

Scenic Quality

The primary scenic quality polygon in this WSA was rated as medium. The western edge is generally valley floor. Some variety of vegetation exists in the polygon and includes Joshua tree, cactus, Mojave yucca, creosote, and mixed desert shrubs. A portion of the Mid Hills Mountain chain is located in the east. This area was rated high and contains both rugged hills and a greater display of vegetation. The overall rating of the area is "medium."

General Recreation

There is excellent hunting along the eastern half of the WSA for deer, dove, quail, and chukar. One concentrated use zone occurs along the eastern boundary, it is adjacent to this WSA but does not fall within it. There are two unevaluated interpretive sites. Birdwatching in this area is fair.

Range Uses and Potential

This WSA is in the Kessler Springs Allotment. A portion of the Providence Mountains Herd Management Area is included in the WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments relating to the inventory supported the findings.

Study Phase

Of 20 comments, the majority favored further study of the area as wilderness. Geological and ecological values characterized the area for those favoring wilderness, with some suggesting designation as a research natural area of ecological study area. Containing Great Basin sagebrush desert areas, it contrasts with the Mojave flora and fauna and offers a valuable educational resource. Eight species of rare and endangered plants were mentioned, including Mojave grama, Cima rattleweed, limestone penstemon, and Stephens penstemon. Regal ringneck snake, prairie falcon, and bighorn sheep habitats are here; a grove of cottonwoods was mentioned. The southern Mid Hills Mountains contain valuable archaeological sites. The multicolored geological

forms offer scenic relief from the surrounding brown-colored areas. Rockclimbing, photography, hiking, and nature study are good here. The area is within a proposed Mojave National Park and near an area being considered for wilderness designation by the State of California. It is along the route of a considered Desert National Scenic Trail.

The Union Pacific Railroad, cattle truck traffic, and vehicle use of roads around the area make the area unsuitable for wilderness according to some. Present use by campers, recreationists, and ranchers exists and should continue, so that the beauty of the area can be enjoyed by all. Mining concerns, already denied over 30 percent of California desert lands, recognize mineral potential in the geology of the area; high grade gold ore is possible and impacts from extraction would be insignificant. Access is needed to maintain grazing operations; 640 acres are leased for this now.

One comment was received in response to the workbook. It recommended that the western boundary be moved 2 to 3 miles away from Cima Road and the railroad tracks.

Draft Plan Alternatives

A variety of public comments specific to WSA 264 was received in response to the Draft Desert Plan Alternatives. One indicated complete agreement with the Protection Alternative, while a second insisted that the entire study area should be combined with Wilderness Study Areas 262 and 264 in being recommended as suitable for wilderness under the Protection Alternative. Another called for recommending more nonmountainous terrain as suitable for wilderness under the Balanced Alternative. One commenter insisted that the use of existing roads and ways should continue within wilderness areas.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Mid Hills Wilderness Study Area (264) is recommended as nonsuitable for wilderness designation.

This area ranked 93 in relative resource values, which placed it in the bottom half of all of the study areas. The area did not possess any of the qualities identified as desert-wide wilderness opportunities. The competing resource values, although also considered low, were determined to be of greater significance than the wilderness values. The area includes potential for metals and clay and supports excellent hunting opportunities.

The study area was recommended for Class L designation. This will provide limited access for mineral exploration and development and still protect the abundant wildlife resources and the cultural and Native American values.

IMPACT OF PROPOSED PLAN

The Class L designation, which covers most of the study area, would result in slight to moderate adverse impacts on wilderness depending upon extent and location of developments. Developments on the bajada would be more visible

than those on the forested hills. A very small portion of the area, on the eastern fringe, is recommended for Class M. Mineral activities in this area should have only slight to moderate impacts on both wilderness and scenic values due to the screening effect of the pinyon-juniper forest. However, the forested area does possess the higher scenic and wilderness values.

WILDERNESS STUDY AREA 265

New York Mountains

GENERAL DESCRIPTION

The northern and western boundaries of this area (42,700 acres)[1] are railroads from Cima to Ivanpah (south of I-15). The eastern boundary is Ivanpah Road, and the southern boundary is a combination of Cedar Canyon Road and maintenance roads used for ongoing cattle operations.

Approximately 15 to 20 percent of this area is non-public land.

Two small areas within this area have been withdrawn for public water reserve purposes. There are a number of recorded mining claims throughout the study area. This area contains 40 percent hills, 35 percent fans, 15 percent mountains, 5 percent pediments, 3 percent dissected fans, and 2 percent plateaus.

WILDERNESS QUALITY

Description of Environment

The New York Mountains exhibit outstanding scenic quality. The range forms the northeastern flank of the mountainous central portion of the East Mojave region, with the Mid Hills and Providence Mountains trending away from them to the southwest. These are the highest mountains in the region. Visual interest is heightened by the rugged pattern of the buff-colored, jointed granitic rocks and boulders that make up the range, dotted with dispersed stands of pinyon and juniper. Pinto Mountain is a striking feature of recent volcanic origin. Vertical walls of lava that form bands interspersed with steep talus slopes add variety to the scene. The northwest side of the New York Mountains is very steep where the mountains rise abruptly from the Ivanpah Valley. The southwestern side presents a more gently sloping terrain characterized by broad valleys (Pinto Valley) and relatively long, broad canyons (for example, Caruthers Canyon). Some mines and unimproved roads are located within the area, but these have only local impact because of the variety of the terrain.

Natural Condition

There are several portions of this area where man and his works dominate the landscape. Grazing operations occupy extensive areas on the southern end of this area. A major ranch occupies Pinto Valley. Access roads reach stock-

[1]Portions of T. 12 N., R. 15 E., T. 13 N., Rs. 14, 15, and 16 E.; and T. 14 N., Rs. 15, and 16 E., SBM.

watering facilities in Fourth of July Canyon, at Bathtub Spring, and at Howe Spring. In addition, an improved road reaches stock-watering facilities at the lower end of Caruthers Canyon. All of the southeastern areas are in private ownership and have been excluded from wilderness consideration. Elsewhere, springs located on the northern and western sides of the range are privately owned or are used for ranching purposes. Such waterholes include Live Oak Spring, Cabin Spring, Cottonwood Spring, a spring in Butcherknife Canyon, and Sacaton Spring. Active patented mining operations are found in the lower reaches of Live Oak Canyon and Sagamore Canyon on the western side of the area. Graded access roads reach these areas. Other active mining operations are found on the northeastern and eastern edges of the range within the vicinity of both Slaughterhouse Spring and Keystone Spring. A microwave communications site is located on the northwestern edge of the interior area and reached by a graded road. Patented mining properties and access roads have also been excluded at Sections 23 and 35 (T. 14 N., R. 15 E.), and Sections 18 (T. 13 N., R. 16 E.). These areas were exluded from the portion which contains wilderness values.

The portion which does contain wilderness values is an area where man is a visitor who does not remain. The interior area of the New York Mountains possesses some of the highest-quality primitive values in the East Mojave region. Spectacular granitic formations form its backbone and effectively limit accessibility to the lower reaches of a few of the larger canyons. Virtually no access routes penetrate it. All of the outside influences fail to disrupt the natural integrity of the interior area, which remains virtually untouched.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

In spite of the presence of numerous outside influences, outstanding opportunities for solitude are still attainable over a large portion of the range. The spectacular, complex terrain of the interior area serves as an effective screen to essentially all of the permanent structures within the area. The resulting opportunities for solitude are probably not matched anywhere else in the East Mojave region. The rugged granitic outcrops, combined with a dense and surprisingly varied vegetation, create a feeling of an area almost totally removed from civilization. As a result, the presence of other users in the interior area may go largely unnoticed. Finally, expansive views in many directions are possible from the interior area, as the range rises well above its surrounding topography. The complex terrain described for this area offers a variety of outstanding opportunities for primitive and unconfined types of outdoor recreation. The pristine interior area, covered by complex vegetation patterns and dotted with water sources can ideally accommodate a variety of primitive types of experiences.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 37 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has a large copper-molybdenum porphyry deposit presently under development in Fourth of July Canyon. This deposit has reserves valued at $3.95 billion. There is known potential for other metals (copper, tungsten, lead, silver, mercury) throughout the WSA and also for fluorite limestone and uranium. There are over 100 unpatented and 27 patented claims recorded.

Vegetation

The New York Mountains region, like the Clark and Kingston Mountains, contains a great diversity of vegetation types along with two unusual plant assemblages. A small stand of white fir is present in the vicinity of Fourth of July Canyon on limestone soils on north-facing slopes. There are only about 30 trees which cover about 0.8 hectare. The community is a Pleistocene relict stand. In addition to the white fir enclaves, the limestone outcroppings also support calciphyte communities of limestone endemics, most of these considered to be sensitive. The over-all vegetation is similar to Clark Mountain (WSA 227).

One interesting sensitive species which occurs in WSA 265 is Eriogonum ericifolium var. thornei, a buckwheat restricted to copper. The only populations are known from Fourth of July Canyon. Rare limestone endemics include: Astragalus cimæ var. cimae, Eriogonum heermannii var. floccosum, and probably Penstemon stephensii, P. calcareus, and Fendlerella utahensis. Other sensitive plant species include Cordylanthus parviflorus.

Wildlife

The New York Mountains contain unusual and limited wildlife habitat unsurpassed elsewhere in the California desert. The range is a refuge for rare biological elements. The lower slopes are dominated by Great Basin sagebrush, juniper, and Joshua trees. Pinyon pine begins to appear at about 5,000 feet elevation. Near the top of New York Peak is a small woodland of white fir.

Among the more significant reptiles in the New York Mountains are the western red-tailed skink, western blind snake, and desert striped whipsnake. The desert tortoise is found in moderate densities over about 8 square miles of this WSA.

The mountains offer superb woodland habitats for a rich and diverse avifauna. The most significant species occurring there are the hepatic tanager (5 square miles -- one of only a few breeding locales in California), gray vireo (35 square miles), yellow warbler, yellow-breasted chat, and golden eagle (two eyries). The lower elevations are used by foraging golden eagles (50 square miles), prairie falcons (25 square miles), and gilded flickers (9 square miles).

The New York Mountains provide permanent (10 square miles) and seasonal (13 square miles) range for desert bighorn sheep. A total of 50 percent of the range of this bighorn sheep herd, estimatd at 30 individuals, is located here. This includes 70 percent of the permanent range and 40 percent of the seasonal range used by this herd. A mule deer concentration area of about 60 square miles occurs in the WSA. Significant bat species include the California myotis and western pipistrelle. Significant rodents include the Panamint chipmunk (33 square miles), Panamint kangaroo rat (24 square miles), and rock squirrel (34 square miles).

Cultural Resources

Several areas of known cultural resource sensitivity/significance are located throughout this WSA.

Native American Uses, Needs, and Sites

The entire central section of this WSA is occupied by the New York Mountains, known as Avi Wacca in the Mohave origin myths (Knack, 1980; p. 17). These mountains contain Mohave sacred elements and mythological stops. This area has been employed traditionally for hunting by both the Mohave and Chemehuevi (Knack 1980, p. 17).

Scenic Quality

The major portion of this area was rated "high." The New York Mountains are unique in that they are the highest in the area and relict stands of "two needle" pinyon and Rocky Mountain white fir trees can be found here. The Midhills lie between the New York Mountains and Providence Mountains. They are less steep and lower. Vegetation is dominated by pinyon pine and juniper with some yucca and cactus species present. Good color contrast is provided by vegetation and surface differences.

General Recreation

There are four evaluated and five unevaluated interpretive sites. Caruthers Canyon, rated high, has a rich variety of plant species and plant communities. The New York Mountains, rated high, are biologically diverse with a lot of plant communities including a relict stand of white fir. Two sites rated "low" are Barnwell (history and railroad) and the Copper Queen mine.

There is one teaching and research site receiving as many as four visits annually by colleges and universities.

Good, fair, and excellent birdwatching opportunities exist in the mountains. There are excellent hunting opportunities for dove, quail, and chukar.

Carruthers Canyon has good floral displays.

The New York Mountains are rated as a good rockhounding area; Barnwell, on the edge, is rated fair.

There is one concentrated use zone which received 2,634 visitor use days in 1978 in a 2.9 square mile area in nature oriented activities and shooting.

The WSA contains a Natural Environment Area, an Outstanding Natural Area, and natural areas.

Range Uses and Potential

The WSA falls into the Kessler Springs and Lanfair Valley Allotments. The WSA also contains burros of the Midhills Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Many comments were received. These generally supported inclusion of the area for wilderness study. Other comments pointed out the presence of mining activity and roads to springs. These were noted in the findings.

Study Phase

Forty comments on this area were divided about equally. Wilderness supporters discussed rare botanical resources, including four grasses on the California Native Plant Society's rare and endangered list, coastal biota (oaks and ceanothus), good ranges of grassland, juniper-pinyon, Joshua tree, and cactus; rugged scenery; the historical Mojave Road, remnants of the 1891-93 Vanderbilt boom; prairie falcon, bighorn sheep, and deer habitat; and archaeological values. A relict white fir forest in Fourth of July Canyon was mentioned. These values, particularly the botanical ones, make this overlap area of three desert vegetation types valuable for scientific and educational activities. Hunting, grazing, and many types of recreation could occur compatibly in a designated wilderness area here, some believe. The Mojave Road is good for hiking and riding. This area contains the second highest mountain range in the desert and a wilderness designation would complement the proposed State Wilderness Area nearby. The southeastern portion of WSAs 262, 263, 264, and 266 would protect an outstanding ecosystem.

Multiple use is imperative for mining operations: seracite claims (referenced in file), silver, tungsten, lead, copper fluoride, high-grade

molybdenum, limestone, wollastonite, and zinc production could occur here, according to various reports. The New York Mountains may have the best mineral deposits in northeastern San Bernardino County. An access road into the area by Pacific Telephone is needed for certain maintenance. Local residents want access for dove, quail, and chukar hunting; this is one of the few areas available locally for this. Regarding rare and endangered species, one commenter submitted that rare species were not always endangered. The combination of terms was labeled a "buzz phrase" used for political purposes. Other comments addressed sight-and-sound intrusions, private land, and road locations.

Numerous comments were received in response to the workbook. Generally, comments mentioned the considerable mineral potential of the area and requested excluding the Dolly Varden mine and claims from the WSA. Several commenters requested boundary changes. One commenter was in favor of wilderness because of the botanical uniqueness (288 species) of the area.

Draft Plan ALternatives

The following range of public comments specific to WSA 265 was received in response to the Draft Desert Plan Alternatives. One agreed with the Protection Alternative, another concurred with the Balanced Alternative, while a third insisted that a greater acreage be recommended suitable for wilderness than is presently recommended under the Protection Alternative. In addition, one recommended that existing access routes should remain open to meet mining and watering needs.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The New York Mountains Wilderness Study Area (265) is recommended as nonsuitable for wilderness designation. The mountain range has historically been associated with mineral development and large metal deposits are being developed in areas along the periphery of the WSA. There is known potential for many minerals throughout the WSA. The study area supports a wide variety of recreation uses, both motorized and nonmotorized. Opportunities for excellent hunting and birdwatching, in addition to other activities, are available. The study area ranked high (37). It did not exhibit any of the additional qualities identified as desert-wide wilderness opportunities.

It was decided that the mineral and recreation resources were of greater significance than the wilderness resources.

The entire WSA was recommended for Class L. This classification would protect the extremely rich plant and wildlife communities, cultural resources, and Native American values, while allowing limited access for mineral exploration and development, and recreation.

IMPACT OF PROPOSED PLAN

The Class L designation would provide protection for sensitive resources while allowing limited mineral exploration and development, grazing

improvements, and access on designated routes. These activities would have a slightly adverse impact on scenic quality and wilderness, with the mineral and grazing developments affecting naturalness and scenic quality and the vehicle access affecting opportunities for solitude and primitive recreation.

WILDERNESS STUDY AREA 266

Castle Peaks

GENERAL DESCRIPTION

The southwestern boundary of this area (39,860 acres)[1] is Ivanpah Road. The northwestern boundary is the railroad line from Ivanpah to Nipton. The northern boundary of the Wilderness Study Area is the southern edge of the utility right of way which contains power transmission lines. This boundary is located along a line 400 feet south of the three existing transmission lines (except where a service road may extend outside the right of way). The eastern boundary is the California/Nevada state boundary; the southern boundary is a regularly used railroad line from Barnwell, California, to Searchlight, Nevada. Approximately 5 to 10 percent is non-public land randomly scattered throughout the area. There are a number of recorded mining claims throughout. This WSA contains 55 percent hills, 30 percent alluvial fans, 10 percent dissected fans, and 5 percent highly dissected fans.

WILDERNESS QUALITY

Description of Environment

The Castle Peaks area includes several features of ecological, geological, and cultural interest. Enclaves of Arizona-type plants, as well as some coastal chaparral species occur in certain areas. The inaccessible, vertical spires of the Castle Peaks afford excellent nesting sites for raptors. Geological interest in the area focuses on the Castle Peaks themselves, a series of spires reaching up to 600 feet above the surrounding terrain. The red-hued peaks were formed by the uplifing of the area through faulting, followed by erosional processes. The peaks are uncommon in the California desert and have significance aesthetic value. The vegetative cover is dominated by pinyon-juniper woodland at the higher elevations and dense stands of Joshua trees on the lower slopes. A number of springs and seeps dot the landscape.

Natural Condition

There are permanent structures in the southern portion of this area that have been tapped for stock-watering facilities for cattle operations based in Lanfair Valley. The roads to Dove Spring and Indian Spring cut deep into the area from its southern perimeter. Several other ways penetrate to a lesser extent. Owing to the generally complex nature of the terrain, the effect of

[1]Portions of T. 14 N., Rs. 16 and 17 E.; T. 15 N., Rs. 16 and 17 E.; T. 15-1/2 N., Rs. 16 and 17 E.; and T. 16 N., Rs. 16 and 17 E., SBM.

these man-made structures on the area, as a whole, cannot be considered significant; however, the maintained roads are specifically excluded from the Wilderness Study Area. There are also a few ways that extend into the central and western portions, but they are revegetating naturally and do not detract from the naturalness of the area. A water line and powerline road serving the Vanderbilt Mining Company in the New York Mountains leaves the far western boundary at Willow Wash. The active mining operations there include heavy duty machinery, graded roads, open pit mines, buildings, and secondary roads. This area and the flood control dikes along the northwest border have been omitted from the portion containing wilderness values. The remaining sections generally appear to have been affected primarily by natural forces of nature, with man's imprint substantially unnoticeable.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Despite the presence of roads to stock-watering and mining operation facilities deep in the interior, outstanding opportunities for solitude may still be found over most of the Castle Peaks area. The rugged terrain of the core area effectively confines the influence of these lightly traveled roads to a narrow corridor immediately surrounding them. The essentially pristine condition of the flanking bajada to the north and the rolling hills to the south adds to the feeling of solitude created by the majestic interior area of the Castle Peaks by forming an extensive area in which the works of man go largely unnoticed. This feeling is further enhanced by the outstanding views of adjacent areas that the range offers, particularly of the Castle Mountains area to the south. The highly diverse terrain offers a variety of outstanding opportunities for solitude and a primitive type of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 69 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Claims include all those that appear on the December 12, 1979, computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for metals (copper and lead) and uranium and thorium. No claims are recorded.

Vegetation

A small portion of desert grassland, once widespread throughout Lanfair Valley, occurs within WSA 266. Otherwise, the vegetation is primarily creosote bush scrub and big galleta scrub-steppe. Cordylanthus parviflorus is the only rare species known to occur within WSA 266.

Wildlife

This WSA includes the concentration area (3 square miles), the permanent range (5 square miles), and the seasonal range (16 square miles) for a herd of about 25 desert bighorn sheep. This represents approximately 90 percent of the total range used by the Castle Peaks desert bighorn sheep herd, including 100 percent of the concentration area, 100 percent of the permanent range, and 80 percent of the seasonal range.

A mule deer concentration area (25 square miles) is also located here. The area provides breeding habitat for yellow warblers, golden eagles (two known eyries), and prairie falcons (one known eyrie). Moderate densities (50-100 per square mile) of desert tortoises are found over about 12 square miles.

Cultural Resources

Approximately 7 square miles of known high sensitivity/significance are located in the WSA.

Native American Uses, Needs, and Sites

The New York Mountains, or Avi Wacca in Mohave, lie in the central section of this WSA. Avi Wacca is recognized as an area of both sacred and mythological significance. Traditional hunting by both Mohave and Chemehuevi is noted for this area (Knack 1980, p. 17).

Scenic Quality

These boundaries include a stretch of the New York Mountains, which are steep and rugged. A series of reddish spires, the highest reaching more than 600 feet above the terrain, dominates the rating area. The pinyon pine and juniper found on the slopes, as well as the Joshua trees, add interesting color and texture to the landscape. Few intrusions are located within the area. The area was rated "high" in terms of scenic quality.

General Recreation

There are five unevaluated interpretive sites in the WSA.

There is one teaching and research site receiving eight or more visits annually from pre-college, college, and university classes. There are excellent hunting opportunities for deer, quail, and chukar. There are fair rockhounding opportunities at two sites. The WSA includes a Natural

Environment Area and an Outstanding Natural Area. Fair to excellent bird watching is available throughout.

Range Uses and Potential

This WSA takes in portions of Kessler Springs, Lanfair Valley, and Crescent Springs allotments.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

The majority of the comments that addressed inventory considerations were in support of the findings. A few others disagreed with the findings.

Study Phase

Only about 10 comments discussed this area. Valuable botanical resources, bighorn sheep and deer habitats, a Joshua tree ecosystem threatened by overgrazing, raptor nesting sites, rare and endangered species, a highly unique overlap of Colorado, Mojavean, and Sonoran vegetation, fir forests and coastal chapparal all merited wilderness protection, many felt. One suggested a contiguous New York-Providence Mountains wilderness unit. Multiple-use designation is warranted by the existence of saline minerals, especially borates, gold, silver, copper, and molybdenum. Wilderness values are nullifyed for up to 2-1/2 miles into the area by the existing transmission line and roads. Mining in the southwestern portion of WSA 266 exerts a negative impact on wilderness qualities. Grazing impacts are evident within the wilderness inventory area.

Several comments were received in response to the workbook. Generally, the comments noted the considerable mineral potential, the need for access routes, and the unique botanical and fragile environment of the area.

Draft Plan Alternatives

The following range of public comments specific to WSA 266 was received in response to the Draft Desert Plan Alternatives. One agreed with the Protection Alternative, another concurred with the Balanced Alternative, while a third insisted that a greater acreage be recommended suitable for wilderness than was recommended under the Protection Alternative. In addition, one commenter stated that existing access routes should remain open to meet mining and watering needs.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Castle Peaks Wilderness Study Area (266) is recommended as suitable for wilderness designation.

This WSA displays possible potential for metals, uranium, and thorium. The area supports many recreational activities which include excellent hunting,

rockhounding, birdwatching, and interpretive sites. Ranking 69 in terms of relative wilderness value, the area did not exhibit any of the additional qualities identified as desert-wide wilderness opportunities. The competing uses were generally considered to be low, and it was decided that wilderness designation would be the highest and best use of the area. This decision will protect the known natural, cultural, and Native American resources and the high scenic quality.

IMPACT OF PROPOSED PLAN

Most of the study area is recommended for Class C. A very small portion of the study area, on the eastern edge, is recommended for Class L. The Class C designation would positively impact the wilderness values of this area. The small area that has been designated Class L would allow for limited mineral exploration and development, grazing improvements, and access on designated routes. The mineral and grazing developments would have an adverse impact on naturalness, while vehicle access would adversely affect opportunities for solitude.

WILDERNESS STUDY AREA 267

Fort Piute

GENERAL DESCRIPTION

The area (44,200 acres)[1] is bordered on the west by a road east of Lanfair Road maintained by the OX Ranch; on the north by an improved road from Barnwell, California, to Searchlight, Nevada; on the east by a combination of the California/Nevada State border and a high-capacity powerline maintenance road; and on the south by an underground telephone cable and associated maintenance road.

Approximately 15 percent of this area is non-public land in scattered parcels. Portions of Sections 13 and 24, T. 12 N., R. 18 E., and Section 7, T. 14 N., R. 18 E., have been withdrawn to protect recreation and public values (Public Land Order 5224). This WSA contains 45 percent hills, 25 percent alluvial fans, 10 percent dissected fans, 10 percent pediments, and 10 percent plateaus.

WILDERNESS QUALITY

Description of Environment

This area includes the Castle Mountains, the Piute Range, and portions of the Lanfair and Piute Valleys. The Castle Mountains are steep and very rugged, while the eastern face drops abruptly to the Piute Valley. The expansive Piute Valley is much lower in elevation than the Lanfair Valley to the west of the range. Vegetation is relatively sparse on the mountains, consisting mostly of creosote, sagebrush, and mixed grasses, while in the flat valleys and on the lower slopes it is more lush and also includes scattered cactus, Mojave yucca, and Joshua trees. Dense riparian vegetation exists along the perennial stream which flows from Piute Springs, located near the southern end of the Piute Range. Color variety exists mostly in the canyons and washes of both mountain ranges where the strata have been exposed through erosion.

Natural Condition

Portions of the area have been excluded where man's works are substantially noticeable, thus degrading the natural character of the land. These exclusions include the area of active and abandoned mining on the western slope of the Castle Mountains where numerous, highly visible road cuts, pits, tunnels, and light-colored tailings exist, and most of the valley west of the

[1]Portions of T. 12 N., Rs. 18 and 19 E.; T. 13 N., Rs. 18 and 19 E.; T. 14 N., Rs. 18 and 19 E.; and T. 15 N., Rs.17 and 18 E., SBM.

Piute Range, which contains a network of ranching roads leading to water tanks and small reservoirs. A graded ranch-related road, which extends southward along the ridge of the Piute Range, and a short road leading to the Fort Piute area have also been excluded.

The remainder of the area generally appears to have retained its primeval character and influence, with man's imprint substantially unnoticeable. The boundary of this remaining area generally follows the original boundary to the north, east, and south, while to the west it follows the ridgeline of the Castle Mountains south of Hart Peak, edges eastward around the grazing-related road from the Hart mine, and then proceeds south, skirting the base of the Piute Range.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Outstanding opportunities for solitude are provided both in the rugged mountains and in the spacious valley areas. The diverse terrain also offers outstanding opportunities for primitive and unconfined types of recreation. The availability of water at Piute Springs enhances primitive recreation opportunities.

Of ecological, geological, and historical significance is the Piute Gorge area with its perennial water supply, Piute Springs. The creek supports dense riparian growth along its edges, attracting many species of wildlife. Man has also been attracted to the water source, beginning with the ancient Indians. In 1867-68 Fort Piute was erected on the site by the U.S. Government and linked to other cavalry outposts in the desert by a road now called "The Old Government Road." Only remnants of the stone walls of the fort and buildings exist today, but the area continues to attract visitors who come to camp, hunt, and explore in the area.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 34 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

There are several perlite quarries on the north side of Hart Peak and on the northeast end of Castle Mountains. An estimated 100,000 tons of perlite have been produced from these quarries. The quarries are wholly within this WSA. The Piute Range consists of interlayered basalt and latite flows from which there are no known metallic deposits; however, from aerial photos it was noted that there are numerous roads, quarries, and prospects in the northern Piute Range and Castle Mountains. These quarries and prospects are probably for perlite and clay.

Outside of the WSA, on the west and northwest, gold and clay have been produced. The gold mines in the Hart area of the Castle Mountains occur in

rhyolite flows and breccias which rest upon gneissic Pre-Cambrian granitic rocks. It is probable that many thousands of dollars worth of gold were mined from here between 1908 and 1918. The potential for additional gold production from the area is high. Kaolinite clay is produced from the southwestern end of the Castle Mountains. This is the only high temperature ceramic clay deposit in southern California. Production exceeds 300,000 tons. The environments for these clay and gold deposits extend into the WSA.

The Castle Mountains are anomalous in uranium and thorium (as detected by gamma-ray surveys). Within WSA 267 continued production of perlite should be expected. There is also good potential for clay, gold, and uranium.

Vegetation

Two unusual plant assemblages occur within this WSA: the Lanfair Valley desert grassland and a small desert riparian zone associated with Piute Springs. General vegetation consists of creosote bush scrub, blackbrush scrub, and big galleta scrub-steppe. No sensitive plant species are known to occur in this area.

Wildlife

This WSA includes the Castle Mountains, the Piute Range, and portions of the Lanfair and Piute Valleys. Vegetation is relatively sparse on the mountains, consisting mostly of creosote, sagebrush, and mixed grasses. Wildlife values include bighorn sheep seasonal range (45 square miles). Two distinct desert bighorn sheep herds are located in the WSA 267. This includes approximately 95 percent of the total range of the Piute Range herd, estimated at 25 individuals, and 70 percent of the range used by the Hart Mountains herd, estimated at 15 individuals.

Also found in this WSA are 70 square miles of prairie falcon foraging habitat and four eyries, 65 square miles of golden eagle foraging habitat and three eyries, one site of habitation for the hepatic tanager, a breeding locale of Virginia's warbler, 8 square miles of mule deer concentration area, and six mountain springs.

Cultural Resources

Approximately 5 square miles of very high sensitivity/ significance are located in the central portion of the WSA.

Native American Uses, Needs, and Sites

This WSA is an area located in the Piute Mountain Range, known to Mohave as Kwikantsotka, which is considered a sacred place. It is still employed by some Mohave for ritually associated collection (hawk and eagle feathers). Piute Spring, located in the extreme southern section of the WSA was employed by Mohave as a campsite (Knack, 1980, p. 17). It is also known in Chemehuevi mythology as a stop during the journeys of the Southern Fox (Knack, 1980,

p. 48). This area is also considered Southern Piute territory sensitive to Mohave and Chemehuevi traditionalists. The region appears repeatedly in Mohave mythology and has been continuously used throughout historic times (Knack, 1980). Of particular sensitivity are areas of traditional religious and ritual use.

Scenic Quality

Scenically, the high point within the WSA occurs at Fort Piute. This site received the highest scenic quality score in the East Mojave Planning Unit. Steep red canyon walls descend to the only flowing water in the planning unit. The head of Piute Canyon is a badlands formation. Extensive flora exist in the area as a result of the perennial water supply. Riparian vegetation includes willow, cattails, watercress, mesquite, and others. Away from the water, yucca, cholla, barrel cactus, and creosote are found in abundance. The rock wall remains of Fort Piute add significantly to the scenic interest.

Except for Fort Piute, water is virtually absent in the range. Vegetation is sparse, consisting of creosote, Mojave yucca, and mixed desert shrubs, but some excellent cacti concentrations are present and include both cholla and barrel.

General Recreation

There are four interpretive sites. The Fort Piute area, rated high, has rock art, archaeological and historic sites, and a riparian area. Piute Gorge, rated high, offers great scenery along an historic trail. Piute Pass, rated medium, has a dense stand of barrel cactus, intermingled with cholla and yuccas. Fort Piute, rated medium, is the remains of a historic outpost along the Old Government Road.

There is good rockhounding in the Castle Mountains and fair bird watching in the northwest portion. There is excellent hunting in part of the area for chukar, quail, and dove; there is fair hunting for quail and chukar elsewhere.

There is one concentrated use zone of 1 square mile around Fort Piute which received 2,620 visitor use days (VUDs) in 1978 and another zone of 6.7 square miles which received 1,411 VUDs. Uses include camping, sightseeing, hunting, shooting, and other activities oriented to the natural environment.

Included in the WSA are an important interpretive site, a natural area, a cultural-historic site, and a Natural Environment Area.

Range Uses and Potential

This WSA contains portions of Crescent Peak, Lanfair Valley, and Piute Valley Allotments.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Many comments referred to the mining activity around Hart. All known mining areas have been excluded. Other comments supported inclusion of the area for its wilderness qualities.

Study Phase

Equally divided support for multiple-use and wilderness designation was expressed in the 30 comments for WSA 267. The isolation of private property, the heavy vehicle use, the proximity of "ugly, buzzing" powerlines, the flyover of jets, the presence of historical values, and the grazing potential of the area were among the arguments against further wilderness study of the area. Mineral potential exists: gold, silver, clay and valuable saline minerals, especially borates. Castle Mountain, within the area, is a good source of clay. Kaolin and montmorillonite clay are found in the western section of WSA 267; the same area has oil, gas, and geothermal potential. Rockhounds explore here, particularly on the western side of Hart Peak.

The Piute Range has values worthy of wilderness designation: riparian habitats, Joshua trees in dense concentrations at lower elevations, bighorn sheep, gila monster habitats rare in California, and the endangered Mojave chub. A geologically spectacular hike through Piute Canyon, archaeological and historical values, a high-elevation spring, varied mammal and bird life, and scientific values are mentioned. Other recommendations are: include the northwest area portion; make a special designation of the area for its ecological and historic values; and coordinate with Nevada for across-the-border protection of values.

Several comments were received in response to the workbook. In general, the comments included requests for a boundary change, a recommendation for wilderness and preservation, and a recommendation for improved maintenance and clean-up procedures.

Draft Plan Alternatives

No public comments specific to WSA 267 were received in response to the Draft Desert Plan Alternatives.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

A major portion of the Fort Piute Wilderness Study Area (267) is recommended as suitable for wilderness designation.

Competing resource values in that portion of the WSA recommended as suitable were considered to be low. The WSA was rated high in terms of relative wilderness values and, based on this, it was decided that the highest and best use of the area was as wilderness.

Roughly 15 percent of the WSA was recommended for Class L designation. This was done to provide access for mineral development in an area of both known and potential mineral value. This designation will also protect the habitat of many wildlife species, in addition to cultural resources and Native American values.

IMPACT OF PROPOSED PLAN

The mountainous portion of the study area is recommended for Class C. Narrow strips of land along the western and eastern edges of the study area are recommended for Class L.

The Class C designation would positively impact the wilderness values, which rated outstanding. The limited use associated with the Class L designation on the western and eastern edges would have no substantial impacts on wilderness values.

WILDERNESS STUDY AREA 270

Table Mountain

GENERAL DESCRIPTION

This area (9,070 acres)[1] is bounded on the north by the well-maintained Cedar Canyon Road, on the south by a grazing road, on the west by Black Canyon Road, and on the east by segments of Cedar Canyon Road and the grazing road. The area is approximately 80 percent public land with non-public holdings occurring mostly at the northern edge. A portion of Section 3, T. 12 N., R. 15 E., has been withdrawn as a public water reserve by Executive Order of July 10, 1919 (Public Water Reserve 65). There are a number of recorded mining claims throughout the study area. This WSA contains 55 percent hills, 25 percent pediments, 10 percent alluvial fans, 5 percent riverwashes, and 5 percent dissected fans.

WILDERNESS QUALITY

Description of Environment

The area is dominated by Table Mountain, a regional landmark, which is a small volcanic mesa. A few other volcanically originated landforms exist within the area, together with non-volcanic landforms, such as small mountains composed of rounded granite. Overall, the area embraces a small, rugged, mountainous interior surrounded by flat valleys. Vegetation varies with location and consists of sagebrush and associated plants in the valley and lower mountain slope areas, grading up to pinyon and juniper on the higher slopes. Color varies with vegetation and rock types.

Natural Condition

Portions of the roadless areas have been excluded from further wilderness consideration to avoid blocks of non-public land and areas where the natural character has been degraded. Cattle ranches and their networks of access routes fall under this exclusion, as well as the mining area just south of Rock Spring where abandoned structures, shafts, slag piles, and old roads are readily evident. A short spur road, used for grazing purposes, enters the area from the south near Woods Wash. The remainder of the roadless area, which consists mostly of the rugged, mountainous interior, generally retains its primeval character. Topographical variation in this core area screens out the surrounding influences. Internally, the area is relatively pristine. The adjusted boundary generally skirts the base of the mountains to the west and north while mostly following the roadless area boundary to the east and south.

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[1]Portions of T. 12 N., Rs. 15 and 16 E., SBM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The rugged interior offers many areas of seclusion and provides outstanding opportunities for solitude. Table Mountain itself is like a remote island, its steep sides barring all but a few from its juniper-forested plateau. The area also offers outstanding opportunities for a primitive and unconfined type of recreation both in the mountainous area and in the valley and bajada areas, providing intimate and enclosed experiences as well as those of an open and spacious nature.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 48 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

The Barnett mine lies approximately 2-1/2 miles northeast of Table Mountain. This mine was worked in 1911-15, during which 143 tons of gold, silver, copper, and lead ore were extracted. Just south of this mine, ore containing the same precious and base metals was also produced in another mine. Aside from these producers, many shafts and prospect pits, related to metallic mineral exploration, exist throughout the Wilderness Study Area.

Anomalous geochemical values in rare earths, zirconium, manganese, and titanium, as well as positive magnetic, gamma-ray spectrometer, and lineament anomalies strongly suggest a favorable environment for metallic mineralization in the mountainous areas of the WSA.

Vegetation

No unusual plant assemblages occur within WSA 270. Vegetation consists mostly of sagebrush scrub, juniper woodland, and scrub-steppe. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

Table Mountain and the adjacent vicinity is used for foraging by prairie falcons and golden eagles. Other bird species of limited distribution present here include the gilded thrasher (1 site) and Bendire's thrasher (14 square miles). The Panamint kangaroo rat, a BLM proposed sensitive species, is present on 4 square miles of WSA 270.

Cultural Resources

This WSA falls completely in an area of predicted high cultural resources sensitivity. No cultural resources surveys have been conducted here.

Native American Uses, Needs, and Sites

No Native American resources have been documented for this Wilderness Study Area. The Mohave and Chemehuevi traditionally employed this region. Resources can be anticipated to occur in the foothill areas.

Scenic Quality

This area coincides with two scenic quality units, both of which were rated high. Composed of both volcanic and granitic landforms, Table Mountain is the most significant visual feature. Vegetation consists of creosote and typical desert shrubs which dominate the flat valleys, while pinyon-juniper stands can be found at the higher elevations. Intrusions include ways and support facilities for ranching.

General Recreation

There is a fair opportunity for rockhounding at the Barnett mine. There is good hunting opportunity for chukar. The WSA is part of a Natural Environment Area.

Range Uses and Potential

This WSA contains portions of Gold Valley and Lanfair Valley Allotments. A small portion of the Woods/Hackberry Herd Management Area is within the WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

All comments that addressed inventory considerations favored this area's inclusion for further wilderness study.

Study Phase

Comments heavily favored further study of the area for wilderness designation. Botanical resources are high: a unique sagebrush location is found in Round Valley; good cover of pinyon-juniper and occasional Joshua tree exists. Geological and archaeological features are mentioned. Table Mountain provides a "sweeping panorama" of the Providence and New York Mountains and is a landmark visible in all directions. These values are important and enhance hiking, riding, photography, rock climbing, painting, and backpacking experiences. "The area provides a mountain-top experience. . . without tremendous exertion."

This beauty is accessible in a vehicle, and a multiple-use designation is mentioned for wide enjoyment of the area. The area is also identified as having good potential for oil, gas, and geothermal resources, the exploration for which requires a multiple-use designation.

Several comments were received in response to the workbook. One letter detailed the history of Yucca harvesting in the area to the present day. Another recommended the area for preservation.

Draft Plan Alternatives

The following range of public comments specific to WSA 270 was received in response to the Draft Desert Plan Alternatives. One agreed with the protection alternative, another requested recommending a greater acreage as suitable for wilderness than was recommended in the Protection Alternative, while a third insisted on recommending more land as suitable for wilderness under the Balanced Alternative (for example, Fenner Valley, Lanfair Valley, and more nonmountainous terrain).

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Table Mountain Wilderness Study Area (270) is recommended as nonsuitable for wilderness designation.

The Wilderness Study Area falls within an area historically used for the production of metallic minerals. Large amounts of gold, silver, and copper have been extracted and tests indicate a potential for more of these plus others. The area also supports two grazing allotments and a variety of recreation activities.

The study area ranked 48 in terms of the relative wilderness values and did not exhibit any of the qualities identified as desert-wide wilderness opportunities. It was decided that the mineral and general recreation values were more significant than those of wilderness. The entire WSA was recommended for Class L designation to protect the prairie falcon and golden eagle habitats. This designation will permit the access necessary to support both the mineral resource and recreation needs.

IMPACT OF PROPOSED PLAN

The limited use associated with the Class L designation would not substantially impact the wilderness values of this study area.

WILDERNESS STUDY AREA 271

Woods Mountains

GENERAL DESCRIPTION

The northern boundary of this area (54,750 acres)[1] is a combination of Cedar Canyon Road and the Gold Valley Ranch maintenance roads. The eastern boundary is Ivanpah Road. The southern boundary is a utility power structure maintenance road. The western boundary is a combination of Black Canyon Road and a water line maintenance road used for cattle operations. Approximately 35 to 45 percent of this area is non-public land in a north-south strip pattern that is uniform throughout. Two small areas have been withdrawn for the protection of their recreation and public values by Public Land Order 5224. There are three small areas withdrawn for public water reserve purposes within the study area. There is an excess of 5,000 acres in the southeastern portion of the study area where there is possible contamination by unexploded military ordnance, a remnant from World War II maneuvers. There are recorded mining claims in the northeast portion of the study area. This WSA contains 40 percent hills, 35 percent alluvial fans, 10 percent pediments, 10 percent dissected fans, 3 percent highly dissected fans, and 2 percent riverwashes.

WILDERNESS QUALITY

Description Of Environment

The unique ecological features of this areas are primarily associated with the flora. Excellent cactus gardens are located adjacent to Woods Wash where it passes through the eastern portions of the Woods Mountains. These cactus gardens have mixtures of barrel, cholla, mammillaria, and prickly pear interspersed with very large Mojave yuccas. An uncommon stand of old man cactus is also found in this vicinity. Outstanding assemblages of cacti and yucca also occur in the uplands and in the canyons near Woods Wash as it enters the Woods Mountains from the north. The area also possesses some wildlife values, including a high diversity of desert bird species. Few outstanding geologic features distinguish the area, although the volcanic origin of the rugged, low-lying hills that form its core may hold some interest. The Hackberry Mountains also include some fossil and gemstone localities. Overall, the Woods/Hackberry area exhibits good scenic quality. From a distance, the Woods Mountains, like so many desert ranges, appear bleak. Once within, however, the viewer is treated to a variety of interesting colors, forms, and textures. The volcanic origin of the area is displayed through blocky lava flow edges, rugged outcrops, and flat volcanic

[1]Portions of T. 10 N., Rs. 17 and 18 E.; T. 11 N., Rs. 15, 16, and 17 E.; and T. 12 N., Rs. 15 and 16 E., SBM.

caps. The vegetation contrasts with the dark lava rocks in both color and texture. The eastern side of the Hackberry Mountains harbors one abandoned mining area. Watson Wash separates the Woods Mountains from the Hackberry Range, effectively dividing the area in two. Several old road scars parallel much of its length. The broad, gently sloping bajada south of the interior area is used extensively for cattle grazing. Grazing-related structures occur throughout the landscape but have only localized impacts.

Natural Condition

Portions of the roadless area have been excluded from further wilderness consideration where the natural character has been degraded. In the north, ranching operations in the Gold Valley area press against the Woods Mountains. Housing developments occur in Fenner Valley in the east. A water pipeline road to Hackberry Springs is in the north portion. A short road from the north, down Watson Wash, to a developed spring has also been excluded. To the west and south of a road serving a water tank in Section 33 (T. 11 N., R. 16 E.) are found scattered grazing operations, including canals and water tanks. In the northwestern portion of the area, ways and old mining scars have been deleted in Sections 7, 8, 16, 17, and 18 (T. 11 N., R. 17 E.). These unnatural areas were excluded from the portion that contains wilderness values. The remaining portions of this area generally appear to have been affected primarily by natural forces, with man's imprint substantially unnoticeable.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The complex topography of the Woods and Hackberry Mountains offers a variety of outstanding opportunities for solitude and primitive types of recreation. The secluded canyons and basins within this area create an environment where outstanding opportunities for solitude could easily be obtained.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 58 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

There are two WSAs in the Hackberry GRA. Essentially, the WSAs include the Hackberry Mountains, Woods Mountains, the northern half of Fenner Hills, and the eastern half of the Table Mountain area.

The Wilderness Study Area contains at least four past producers of metallic minerals. The Denver mine is located in the southeastern portion of the Hackberry Mountains. The mine was worked for gold, silver, copper, and lead from 1911 to 1912. At the northern end of the Fenner Hills, in Section 2, T. 10 N., R. 17 E., at least 100,000 pounds of copper were extracted in 1926-30. The Barnett mine lies approximately 2-1/2 miles northeast of Table Mountain.

This mine was worked from 1911 to 1915, during which 143 tons of gold, silver, copper, and lead ore were extracted. Just south of this mine, ore containing the same precious and base metals was also produced in another mine. Aside from these producers, many shafts and prospect pits, related to metallic mineral exploration, exist throughout the Wilderness Study Area.

A clay mine, which lies south of the Denver mine, is the only known past producer of industrial or nonmetallic minerals in the GRA. However, several mines and quarries, which were worked for chalcedony, opal, and perlite, are present in the eastern portions of Woods Mountain and Hackberry Mountain.

Anomalous geochemical values in rare earths, zirconium, manganese, and titanium as well as positive magnetic, gamma-ray spectrometer, and lineament anomalies strongly suggest a favorable environment for metallic mineralization in the mountainous areas of the WSAs. In particular, uranium, thorium, and potassium gamma-ray values correlate well with one another in the Woods Mountain and Hackberry Mountain areas. This evidence, in conjunction with a circular negative bouguer gravity anomaly in this area (which may indicate ore genesis or control) and the many fault systems, suggests the likelihood of uranium and thorium mineralization in portions of the wilderness area. In fact, an uranium occurrence has been reported in Section 32, T. 12 N., R. 17 E., which is on the northeastern edge of this WSA.

Vegetation

The Woods and Hackberry Mountains region within this WSA contains a rich succulent flora including both cacti and yuccas. The area also contains appreciable stands of creosote bush, blackbrush, and big galleta scrub-steppe. No sensitive or significant plant species are known to occur within WSA 271.

Wildlife

The unique ecological features of the WSA include considerable wildlife assets. In the Hackberry Mountains, there are 2 square miles of bighorn sheep concentration area, 4 square miles of permanent range, and 8 square miles of seasonal range. This represents the entire range of the Hackberry Mountains bighorn sheep herd, estimated at 21 individuals. The Woods Mountains contain 6 square miles of permanent bighorn range and 13 square miles of seasonal range.

There are 13 square miles of desert tortoise habitat with densities of 20 to 50 animals per square mile. Twenty-five square miles of prairie falcon foraging habitat and one eyrie, 60 square miles of golden eagle foraging habitat and three eyries, 18 square miles of Bendire's thrasher habitat, 35 square miles of mule deer concentration area, and the Woods Mountains Outstanding Natural Area occur in this WSA. Significant portions of the Bendire's thrasher's range (3%) and the Woods Mountains Outstanding Natural Area (70%) are located here, as is approximately 2 percent of the Fenner-Chemehuevi Desert Tortoise Area.

Cultural Resources

Several areas of cultural resource sensitivity/significance are located within this WSA.

Native American Uses, Needs, and Sites

The only documented Native American resources within this WSA are Chemehuevi pictographs.

Scenic Quality

Although the Woods Mountains, the primary feature in the area, appear barren from a distance, a variety of interesting colors, forms, and textures exist within its borders. The volcanic origin of the area is displayed through blocky lava flow edges, rugged outcrops, and flat volcanic caps. Deep canyons displaying outstanding cactus gardens exist. Ways and mines are the primary intrusions within the area, but impacts tend to be localized. The Von Trigger Hills and Clipper Valley are also a part of this area. Generally flat and lacking in vegetative variety, these areas are more heavily intruded and display fewer scenic values.

General Recreation

There are seven interpretive sites, but only two of these are evaluated. Woods Wash, rated high, has both cactus gardens and petroglyphs. Hackberry Mountains, rated low, has many fossils.

There is one teaching and research site used at least four times annually by pre-college, college, and university classes.

Fair birdwatching exists along the northern boundary.

There are good hunting opportunities for dove, quail, and chukar. The Hackberry Mountains are an excellent rockhounding area with a wide variety of specimens, including agate and petrified wood.

There are three historic or cultural sites, and the WSA is part of a Natural Environment Area.

There are four concentrated use zones. Hackberry Spring received 724 visitor use days (VUDs) in 1978. A rockhounding area southeast of the Hackberry Mountains received 9,411 VUDs in 1978. The Woods Wash petroglyph area received 1,448 VUDs. The 25 square mile Hackberry Mountains received 2,896 VUDs. Uses include hunting, shooting, camping, rockhounding, and many other nature-oriented activities.

Range Uses and Potential

This WSA takes in portions of Lanfair Valley and Colton Hills Allotments. The WSA includes a major portion of the Woods/Hackberry Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Most comments that addressed inventory criteria supported inclusion of the southern half of the roadless area into wilderness study designation. Roads mentioned in public comments were rechecked and added where found to meet the definition.

Study Phase

Comments supporting further study of WSA 271 for wilderness designation focused on scenic, ecological, paleontological, cultural, and recreational values perceived there by visitors. The area was termed an excellent "ecological study area," and designation as a "Research Natural Area" was supported. Day hikes, backpacking, photography, rock collecting, and camping opportunities exist. Caves in tufa beds were mentioned. Woods Mountains contain a wide range of micro-environments, yucca and cactus-studded lava plateaus, deep canyons with multicolored volcanic rocks, and "garden-like plant communities amid spectacular volcanic sites." Rock shelters, petroglyphs, and raptor nesting sites were also mentioned. Paleontological values, including oyster and rhinoceros fossils at sites in Woods Wash and the Hackberry Mountains, warrant wilderness protection. Woods Wash is an "excellent" wash system, with outstanding scenic, botanical, and prehistoric values. The alluvial fan in the southern portion of WSA 271 has rich vegetation, with Watson, Black Canyon, and Woods Washes all channeling moisture there. Vistas give a good sense of a large-scale basin. Some comments were critical of BLM management that allowed access to private land within the area for commercial yucca harvesting, as well as overgrazing by cattle and wild burros, and vehicle traction damage in this and other potential wilderness areas. A suggestion was made to delete from wilderness consideration all that area below 4,000 feet elevation and to shrink the southern and western borders to concentrate wilderness protection to a part of the Hackberry Mountains. An extensive survey of native plants in this area was provided. The BLM was cautioned not to trade Southern Pacific land-holdings outside of the school districts which depend upon them for tax revenue. Disposal and trading of lands should proceed with consideration of local economic impact. A recommendation for adequate proximate parking areas for wilderness areas was provided with specific measures.

Intrusions not considered part of the inventory process were mentioned as nullifying wilderness qualities of this area: OMNI Beacon, a great number of general aircraft (eight per hour were noted), obvious small-game guzzlers, ranch and grazing evidence at the periphery, dust pollution, traffic and noise from bordering roads, particularly during cattle moving season, hunting noise, and the visibility of transmission lines. The area is cited by utilities as proposed for future communication sites which would require adequate buffer zones and flexible utility line corridors and access roads. Private land access rights, impacts on adjacent private lands, and general economic impacts of wilderness designation were recommended for consideration. Multiple-use support for the area is based on general concern

for economic impacts of mining withdrawal, energy needs, and vehicle-related recreational needs. Significant geological evidence of potential for copper deposits exists in the Hackberry Mountains beneath the Tertiary volcanic cover. Gold, silver, uranium, and tungsten mineralization is mentioned. Access for exploration for needed oil, gas, and geothermal resources in the area will be inhibited by wilderness designation and can proceed without significant environmental damage. Rockhounds desire vehicle access to collect opalite, flame agate, jasp agate, nodules in ash, jasper, and other gem stones; the eastern side of the Hackberry Mountains is a good collecting area. Access for hunting, four-wheel-driving, family recreation, and grazing is urged.

Numerous comments were received in response to the workbook. General recommendations included preservation of the area as wilderness, more access into the site, and maintaining the multiple use of the area for recreationalists and for income-earning yucca harvesting.

Draft Plan Alternatives

A variety of public comments specific to WSA 271 was received in response to the Draft Desert Plan Alternative. One agreed with the Protection Alternative, another concurred with the Balanced Alternative's recommendations, while a third sought the recommendation of more acreage as suitable for wilderness than was recommended in the Protection Alternative. One commenter insisted on a greater acreage recommended as suitable for wilderness than was recommended in the Balanced Alternative (for example, Fenner Valley, Lanfair Valley, and more nonmountainous terrain). In addition, one stated that existing vehicle routes should be retained within wilderness areas.

RATIONALE FOR THE PROPOSED PLAN

The Woods Mountains Wilderness Study Area (271) is recommended as nonsuitable for wilderness designation.

This WSA has four mines identified as past producers from which large amounts of copper, gold, silver and lead have been extracted. Various tests indicate the existance of more of the same, plus other minerals. This area, which includes the Woods and Hackberry Mountains, supports a wide variety of recreation resources including interpretive sites, hunting, birdwatching, and rockhounding.

This Wilderness Study Area ranked 58 and did not exhibit any of the qualities identified as desert-wide wilderness opportunities. It was determined that the mineral and recreation resource values were greater than the wilderness values.

To protect the small bighorn sheep herds, desert tortoise, and prairie falcon and golden eagle habitats, the area was recommended for Class L designation. This would also protect the cultural resource and Native American values

present, while allowing access for mineral exploration and recreation activities.

IMPACT OF PROPOSED PLAN

The limited use associated with the Class L designation would result in low adverse impacts to wilderness values. Controlled mineral development and grazing improvements would adversely affect naturalness, while access on designated routes would affect opportunities for solitude.

WILDERNESS STUDY AREA 272

Signal Hill

GENERAL DESCRIPTION

The northern boundary of this area[1] (containing 45,470 acres) is a telephone cable right of way. The eastern boundary is a major water pipeline road. The southern boundary is a powerline right of way and service road. The western boundary is the Lanfair Road.

Approximately 30 to 40 percent of the area is non-public land distributed in a north-south direction and in uniform strips. Approximately four sections in the eastern portion of the area possibly have been contaminated by unexploded military ordnance, a remnant of Word War II maneuvers. There are at least 20 recorded mining claims in the eastern half of the area. This WSA contains 35 percent alluvial fans, 30 percent pediments, 25 percent hills, 7 percent riverwashes and 3 percent plateaus. Most soils in this WSA are moderately sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

The topography appears uniform but is actually diversified in several portions. The southern portion is a relatively flat bajada, sloping southward. To the north and east is a series of small to medium-sized hills, enclosed valleys, and reddish-brown and gray canyons. The valleys accommodate stands of mesquite and other river-basin shrub and grass species. Vegetation on the hills is composed of sparsely uniform creosote stands. A variety of portions contain different densities of Joshua and Mojave yucca.

Natural Condition

This area has a past history of a few old mining activities around Signal Hill and the Von Trigger Hills that now appear to be abandoned. Patented mines have been excluded at Sections 2, 11, and 10 (T. 11 N., R. 17 E.). None of the other related impacts seriously degrades the landscape for any distance; for example, old jeep trails that lead to the now-abandoned Tungsten Flat mine and Leslie Ray mine are not readily noticeable. Natural revegetation is occurring. There are several ways north of Signal Hill and the Von Trigger Hills which also do not seriously affect the naturalness or integrity of this area. There is also a way that starts from the south and goes to a water tank which is presently being used for an ongoing cattle

[1]Portions of T. 10 N., Rs. 18 and 19 E.; T. 11 N., Rs. 17, 18, and 19 E.; and T. 12 N., Rs. 17, 18, and 19 E., SBM.

operation. Another way is paralleled by an east-west fence, but the way is revegetating. Wilderness values exist in this area which contains a variety of topographic and vegetative screening so that man and his work have very limited effect on the landscape and do not seriously hinder the primeval characteristics. East of Lanfair, permanent structures or human habitation, plus mining activities, caused a portion to be excluded from the WSA. The Wilderness Study Area boundary is common with the roadless area boundary, with the exception of the exclusion of mining activities in the northwestern corner.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Outstanding opportunities for solitude and primitive types of recreation can be found in the area because of the diversity of landform, vegetative screening, secluded valleys, narrow canyons, and wide plains.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 103 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

The Signal Peak area has been heavily prospected and appears to have potential for metallic mineralization. During the 1890's gold and silver were mined here. During World War I there was prospecting for tungsten in veins in granitic rock. During this period the Leslie Ray mine produced 13,600 pounds of copper, 960 pounds of lead, and 400 ounces of silver. The mine is also mineralized with gold and vanadium. In this area there are 17 unpatented claims currently filed (December 1979) with the BLM.

There are geochemical anomalies in niobium, cerium, chromium, colbalt, and vanadium. The cerium value is the highest in the northeastern Mojave Desert. Levels of zinc, tin, and molybdenum are high but lower than one standard deviation above the mean. Remotely sensed tonal anomalies in the area are due to weathering of disseminated pyrite in sericitized and chloritized quartz monzonite. There is some potential for a copper porphyry deposit in this area.

In the Von Trigger Hills there are three gold mines and the California copper mine. The disturbed areas surrounding these mines have been excluded from the WSA. The California mine produced about 450,000 pounds of copper, 4,000 ounces of silver, and 350 ounces of gold. The California mine area is anomalous in thorium as determined by a NURE gamma-ray survey. A stream sediment sample from the east-central part of the range is high in thorium. This same sample was higher than one standard deviation above the mean in silver, zinc, and molybdenum. There are no known mines upstream from this sample, but this is good indication of mineral potential.

Within WSA 272 there is potential for copper, lead, silver, gold, and a lesser potential for molybdenum and thorium. All but gold are strategic commodities.

Vegetation

No unusual plant assemblages occur within WSA 272. Vegetation consists mostly of creosote bush scrub. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

Wildlife is abundant with bighorn sheep present on 2 square miles at the southern end of the Piute Range and 4 square miles of transient range in the Von Trigger Hills. This includes approximately 50 percent of the transient range of bighorn sheep in the Von Trigger Hills and 2 percent of the total range of the Piute Range bighorn herd. There are 17 square miles of desert tortoise habitat with densities of 20 to 50 animals per square mile.

Cultural Resources

Three areas of known cultural resource sensitivity/significance are located within the WSA.

Native American Uses, Needs, and Sites

The only Native American resources within the WSA are located in the extreme northeastern section. Southern Piute territory (Pah-Ranne) and a Mohave sacred area of ritual collection, Kwikantsotka, both overlap the WSA in the northeast.

Scenic Quality

This area is comprised of four scenic quality polygons, the largest of which is a portion of Clipper Valley. Although some small hills exist, the area is generally flat, open valley bottom. Very little vegetation and color are evident. A medium rating was given to the Von Trigger Hills area. Some vegetation, which includes some Joshua trees, is scattered throughout. Surface color and contrast can be found. The over-all rating of the area is "medium."

General Recreation

This area has excellent hunting opportunities for quail, chukar, and doves. Good floral displays occur in the Von Trigger Hills for Mariposa lilies and hedgehog cactus. There is fair birdwatching in the northwestern corner. There is a good rockhounding area on Signal Hill.

Range Uses and Potential

The WSA is in the Lanfair Valley Allotment.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Most of the public comments stated that the area was unnatural. Another comment suggested that some of the identified roads did not meet the road definition. Field examination and consultation with the rancher confirmed the findings.

Study Phase

Multiple-use concerns for this area include the exploration and mining of high-grade copper deposits with significant gold credits which may exist here, as well as tungsten, uranium, silver, and copper; geothermal resource exploration; and rockhounding for opalite, flame agate, jaspagate, nodules in ash, and jasper. Hunting, grazing, four-wheel driving, camping, motorcycling, nature study, and photography are also mentioned. The OMNI beacon, aircraft, transmission lines near or adjoining the area all exert negative impacts. Private lands, grazing impacts, existence of an old railroad line, and typical, not unique, vegetation are other arguments against wilderness designation.

Designation of the area for wilderness was supported by those who noted outstanding opportunities for students of cacti and wildlife. The inclusion of the Von Trigger Hills for further study was urged. Objections to BLM-provided access to private lands for damaging yucca harvesting were voiced; the severe soil disturbance caused by overgrazing and motorized vehicle use were also discussed in one comment.

Several comments were received in response to the workbook. One commenter recommended multiple-use of the area for yucca harvesting, and another recommended improved access is needed to the "Water Tank."

Draft Plan

The following public comments specific to WSA 272 were received in response to the Draft Desert Plan Alternatives. One concurred with the recommendations of the Balanced Alternatives. Another sought the recommendation of additional nonmountainous terrain as suitable for wilderness under the Protection Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Signal Hill Wilderness Study Area (272) is recommended as nonsuitable for wilderness designation.

Included within the WSA are sites of historic mining activity dating back to the 1890s. The area produced a large amount of metals and other minerals and display the potential for many more. In addition to mineral development, the area offers a variety of general recreation activities. Excellent hunting, floral display, birdwatching, and rockhounding opportunities are found here.

This area ranked relatively low (103) in wilderness values and did not possess any of the qualities identified as desert-wide wilderness opportunities. It was decided that the mineral and recreation resource values were more significant than the wilderness values.

To protect the abundant wildlife, cultural, and Native American values, the area was recommended for Class L. This classification would provide access for mineral exploration and development and general recreation.

IMPACT OF PROPOSED PLAN

The limited development and use of the study area associated with the Class L designation would have no substantial impact on the wilderness values, which rated poor in this area.

WILDERNESS STUDY AREA 276

Dead Mountains

GENERAL DESCRIPTION

The northern boundary of this area (42,650 acres)[1] is a utility power structure right of way and associated maintenance road. The eastern boundary consists of the California/Nevada state border and the California Desert Conservation Area boundary. The southern boundary is a combination of a gas pipeline right of way, Interstate 40, and the railroad maintenance road (southwest). The western boundary is State Route 95. Approximately 35 to 45 percent of this area is non-public lands in north-south strips and scattered parcels in the southeastern portions. Two small areas within Sections 4 and 10, T. 11 N., R. 21 E., are withdrawn for Water and Power Resources Service. Withdrawn for a public water reserve is SW1/4SW1/4, Section 18, T. 10 N., R. 21 E. Approximately 12 sections of the area in the west-central portion have been possibly contaminated by unexploded military ordnance, a remnant of World War II maneuvers. There are at least 15 recorded mining claims in the south-central portion of the area. A portion of Section 4, T. 9 N., R. 22 E., has been established as a material site for the State of California. This WSA contains 35 percent dissected fans, 30 percent hills, 15 percent mountains, 10 percent alluvial fans, 5 percent pediments, and 5 percent highly dissected fans.

WILDERNESS QUALITY

Description of Environment

The Dead Mountains contain very rough and steep mountainous terrain with rust-colored peaks up to 3,598 feet (Mt. Manchester). These mountains are surrounded to the west by a large bajada that gradually slopes westward to State Route 95. This bajada contains small reddish-brown washes and playas that are covered with uniform patterns of creosote and associated creosote bush scrub plant communities such as yucca trees, scattered portions of red barrel and cholla cacti, and desert annual grasses. The northern portion contains secluded, winding canyons covered with jumbles of rocks that have inteesting shapes and forms. There are also small colonies of yuccas and cacti within a small sheltered basin in this portion. The eastern portion of this mountain range contains wide, open-spaced valleys and a series of very steep, jagged peaks. These peaks have eroded somewhat and have formed smaller, rocky ridges and deeply eroded washes which blend into a moderately

[1]Portions of T. 9 N., Rs. 20 and 21 E.; T. 10 N., Rs. 20 and 21 E.; T. 11 N., Rs. 20 and 21 E.; and T. 12 N., Rs. 20 and 21 E., SBM.

sloping bajada that extends eastward to the highway from Needles to Davis Dam. Many small winding canyons have been cut into the Dead Mountains, but were abruptly halted by the massive geologic structure at the heart of these mountains. The vegetation on the eastern side includes scattered densities of creosote bush scrub plant communities on the bajada and limited quantities of river-basin plant communities in the washes. The southern portion of this chocolate and reddish-brown mountain range gradually tapers off in height, then abruptly ends. A small bajada extends southward and is bisected by the railroad maintenance road and railroad, which is the southern boundary.

Natural Condition

Portions of the area have been affected by man and have been excluded from the part of the area meeting wilderness criteria. A rock quarry and road used by the Water and Power Resources Service has been excluded in Sections 4 and 5 (T. 11 N., R. 21 E.) The area west of Piute Wash near the western border from Section 16 (T. 11 N., R. 20 E.) has also been excluded from wilderness study. This area contains numerous ways, some from past military activities, and a large cement water reservoir which seriously detract from the naturalness of the area. In the southwestern portion, Section 26, 27, 34 and 35 (T. 10 N., R. 20 E.), an area was excluded because of extensive bulldozed mining roads. The remainder of the area is affected primarily by natural forces, with man's imprint substantially unnoticeable. There is a way in the northern portion that is reverting back to nature.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The Dead Mountains contain areas where outstanding opportunities for solitude can be obtained. The large winding canyons, and rugged terrain create an atmosphere where solitude could be enjoyed without disruption. Primitive forms of recreation could be enjoyed, including the freedom of unconfined movement within the majority of this area because of the rugged winding canyons and the size and the wide diversity of geological landforms.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 111 out of 137 WSA.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Some minor amounts of high-grade copper ore were first mined from the eastern slope of Mt. Manchester during the 1860s. During World War I there was minor production of manganese from the Black Mountain mine, which was formerly prospected for copper. The copper-manganese mineralization at this mine extends from the southern end of the range (Sec. 12, T. 9 N., R. 21 E) northward for about 2 miles. Copper and manganese are strategic commodities. Directly west of the Black Mountain mine on the west side of the range there

are three areas of copper mineralization which were prospected and explored as recently as the early 1970s. These prospects are aligned on a major shear zone and lie in Section 2, T. 9 N., R. 21 E. and Sections 11, 26, and 35, T. 10 N., R. 21 E. Although these copper showings have limited economic potential, there is potential for greater value at depth. In the northwestern part of the range there is one gold mine.

In the northern part of the range there are uranium and uranium/thorium ratio anomalies (as detected by aerial geophysical surveys). In Section 2, T. 11 N., R. 20 E. , there is an allanite-bearing pegmatite vein of mineralogic interest. Allanite contains cerium, lanthanum, thorium, and uranium.

Besides metallic mineral deposits, on the eastern side of the range there are non-metallic deposits of interest. Near the Nevada border in Section 7, T. 10 N., R. 22 E., the Water and Power Resources Service quarries large amounts of broken rock for levees. High-quality bentonitic and montmorillonitic clay south of the rock quarry have been prospected. The claim holder plans to produce and market the clay to the oil industry for drilling mud. He is also looking into the possibility of extracting aluminum from the clay. This locality has potential for zeolites also.

Vegetation

No unusual plant assemblages occur within WSA 276. Vegetation consists mostly of creosote bush scrub.

Wildlife

About 30 percent of this area is transient range for bighorn sheep. This includes approximately 95 percent of the transient range present in the Dead Mountains. There are about 9 square miles of desert tortoise habitat with densities of 20 to 50 tortoises per square mile and another 9 square miles with densities of 50 to 100 tortoises per square mile in this area. One spring in the Dead Mountains is a source of water for wildlife.

Cultural Resources

This WSA has many recorded sites, and a good deal of the area is predicted to have many aboriginal sites.

Native American Uses, Needs, and Sites

The eastern half of this WSA is known as an area of hawk and eagle feather collection by the Mohave, called Ave-mat-ha. The Dead Mountains, located in the southern part of the WSA, are considered by the Mohave and Chemeheuvi to be spiritual and to possess healing power. Other mythological references to the Dead Mountains are identified by Mohave elders, such as Akatai, place of ritual feather collection, and Erhoo-Kussa, the place where birds got the hole in their noses. Amatmawhat Ahat-Hayveh, located on the southeast border of the WSA, is a Mohave mythol ogical place where bears and badgers go to

drink. A probable locale of an Apache/Mohave war activity is also documented for the southern edge of the WSA.

Scenic Quality

Portions of three scenic quality polygons fall within the borders of this WSA. They vary in ratings between medium and low. The larger central portion, which contains the Dead Mountains, rated medium, but the over-all rating for the WSA was "low."

Although barren when viewed from the outside, internally they display an interesting variety of rock patterns and colors. Vegetation is relatively sparse over-all, although there are some specific locations where picturesque stands of interesting vegetative types occur. An outstanding stand of Bigelow cholla occurs on the west slopes of the Dead Mountains. Aside from the local intrusions, the mountains contain enough elements of interest to provide good desert scenery.

General Recreation

There are four unevaluated interpretive sites, but only three of interest. Dead Mountains cholla is on the west-central slopes of the mountains and consists of dense stands of cholla. Picture Canyon has from 300 to 500 petroglyphs along a natural access route between the Colorado River and Piute Valley. Red Springs is an active spring on a large spring mound. Rockhounding opportunities range from good to fair for materials such as jadeite, copper minerals, and vanadinite.

Range Uses and Potential

No allotments occur in this WSA. This WSA contains a large portion of the Dead Mountains Herd Management Area.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Those comments pertaining to the inventory agreed with the findings. Several comments spoke to the many ways and a mine. After field checks, the appropriate changes were made. Other comments indicated the area was a popular recreation area.

Study Phase

About 10 comments addressed WSA 276. The western and southern parts of the area have oil, gas, and geothermal potential which can be explored for without significant environmental disruption. Some sites in the eastern portion may be needed for riprap quarries for Colorado River Project work by the Water and Power Resources Service. Sections 12 or 13 may contain huge deposits of titanium ore. Santa Fe Railroad officials expressed a possible need for access for flood control and derailment work. A concern about the

City of Needles urban expansion was expressed. Visitors seem to be limited to prospectors and rockhounders, according to one comment.

Excellent wilderness opportunities are cited by some, particularly at Homer Mountain and Piute Wash. Archaeological and historic values are mentioned in general terms as warranting wilderness designation.

One comment was received in response to the workbook. The commenter recommended preservation of the area for wilderness.

Draft Plan Alternatives

No public comments specific to WSA 276 were received in response to the Draft Desert Plan alternatives.

SUMMARY OF RATIONALE FOR PROPOSED PLAN

The Dead Mountains Wilderness Study Area (276) is recommended as nonsuitable for wilderness designation.

The area was rated low in relation to the other study areas and did not possess any qualities identified as desert-wide wilderness opportunities. Since the competing mineral and recreation resource values were also considered low, it was decided that the mineral and recreational values in the WSA were more significant than the wilderness values.

The area includes many recorded cultural resource sites and areas of importance to Native Americans. To protect these, plus the wildlife resources, the Wilderness Study Area was recommended for Class L. This will provide the access needed for exploration and development of the mineral resources and recreation activities.

IMPACT OF PROPOSED PLAN

The limited development associated with the Class L designation would have no significant impact on the wilderness values, which rated poor in this area. However, vehicular use of designated routes would have a negative impact on opportunities for solitude in the vicinity of the routes.

WILDERNESS STUDY AREA 288

Piute Mountains

GENERAL DESCRIPTION

The area (24,375 acres)[1] is bordered on the north by the Old National Trails Highway (State Route 66) and Interstate 40. The eastern boundary is defined by a utility service road and a petroleum line service road. The southwestern border is a mine access road which divides the Piute Mountains. The southeast border is a ranch road. The site incorporates approximately 9 sections of non-public land, running in a north-south direction and comprising approximately 30 percent of the total area. There is a small area in the southwestern portion that is withdrawn for public water reserve purposes under Executive Order of July 10, 1919 (Public Water Reserves 22). In addition, there are about 10 sections that have been possibly contaminated by unexploded military ordnance, a remnant of World War II maneuvers. This WSA contains 40 percent hills, 25 percent sediments, 23 percent alluvial fans, 10 percent dissected fans, and 2 percent highly dissected fans. Most soils in this WSA are highly sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

The area includes the northern portion of the Piute Mountains and the adjacent alluvium of Ward Valley. The mountains consist of rough, rocky ridges which run in a northeast-southwest direction reaching a maximum elevation of 4,165 feet. The mountains incorporate numerous deep canyons and an extensive system of connecting washes, which bisect the area. These washes are densely vegetated with low desert shrubs, while the rocky slopes and higher alluvium support a lush creosote bush scrub plant community. Areas with outstanding cactus displays (cholla, barrel, hedgehog) and yucca are scattered throughout. The western end of the roadless area is the mine access road which divides the Piute Mountains, while the eastern end includes parts of Ward Valley. Both of these bajadas support dense creosote communities.

Natural Condition

With few exceptions, the roadless area is generally free from man's imprint. Evidence of motorized vehicle activity can be found near the boundaries of the area, but impact is negligible. A few ways, mainly in the northern section, run from the eastern and western borders toward the foothills.

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[1]Portions of T. 7 N., Rs. 18 and 19 E.; T. 8 N., Rs. 18 and 19 E.; and T. 9 N., Rs. 18 and 19 E., SBM.

These ways either disappear or are lost in washes before they penetrate deeply into the mountain sides.

The road along the southern boundary provides access to numerous mining activities (claims, prospects) along its length, and a guzzler on the eastern end. Because of these activities, the Wilderness Study Area boundary has been displaced to the north to ensure that the remaining area does not include impacts of such magnitude.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The washes, canyons, and rough landform provide the topographic relief and the vegetative cover necessary to isolate areas and provide screening. Both of these factors contribute to insure areas where outstanding opportunities for solitude exist. Size and variety of terrain provide outstanding opportunities for primitive and unconfined types of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 102 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for metals, and barite, limestone, uranium, thoruim, and oil and gas. No claims are recorded.

Vegetation

No unusual plant assemblages occur within WSA 288. Vegetation consists mostly of creosote bush scrub. No rare plant species are known to occur within this WSA.

Wildlife

The WSA includes 40 square miles of desert tortoise habitat, with densities of 20 to 50 animals per square mile in the Fenner-Chemehuevi Desert Tortoise Core Area. Approximately 30 percent of the desert bighorn sheep transient range occurs in the northeastern end of the Piute Mountains.

Cultural Resources

Within this WSA there are no areas of known cultural resources sensitivity/significance.

Native American Uses, Needs, and Sites

The Piute Mountain Range, known to the Mohave as Kwikantsoka, is considered a sacred place (Kroeber, 1919, Myth #17) Chemehuevi, Mohave, and Panamint Shoshone have employed this area for bighorn sheep and deer hunting and seasonal collection.

Scenic Quality

The northern portion of the Piute Mountains is generally metamorphic and in some areas volcanic in nature. Compared to the granitic southern half, this area appears more rounded with blocky, rock outcrops. Vegetation is less impressive in the northern portion than in the southern. Scattered cacti and Mojave yucca, in addition to the typical shrubs and grasses can be found. Most factors were rated medium in the area.

General Recreation

Quail and dove hunting is rated good in portions of this WSA. No other recreation resources are known to exist in this WSA.

Range Uses and Potential

The WSA is within the Lazy Daisy Allotment. The Piute Mountains Herd Management Area is partially within the WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments indicated rockhounding interest, potential for mineral development, unique ecological factors, and natural integrity of the landscape. The area was retained for further study.

Study Phase

Most of the nine comments on WSA 290 expressed multiple-use concerns for the area. The city of Needles opposed restriction of access to materials for flood-control for the city. The area is popular with rockhounds. Access is needed for railroad maintenance. Mineralization (gold, silver, and copper) exists, according to one comment. A transmission line, pipeline, and roads are bordering sights which require up to a 2-1/2 mile pullback of boundaries. Oil, gas, and geothermal potential exists.

Support for wilderness designation included mention of stands of teddy bear cholla, among the best in the desert, and other outstanding cactus gardens.

No comments were received in response to the workbook.

Draft Plan ALternatives

No comments were received in response to the Draft Desert Plan Alternatives.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Piute Mountains Wilderness Study Area (288) is recommended as nonsuitable for wilderness designation.

The study area ranked low (102) in wilderness values relative to the other areas. It did not possess any of the qualities that were identified as desert-wide wilderness opportunities. The WSA has been identified as having possible potential for minerals, oil, and gas and is located within the Lazy Daisy grazing allotment. The low wilderness rating and minerals potential were primary considerations in arriving at the nonsuitability decision.

The area was recommended for Class M to allow access for mineral exploration and development and still provide a degree of protection of the natural and Native American values.

IMPACT OF PROPOSED PLAN

The mineral development associated with the Class M designation would adversely impact the wilderness values, which rated poor over-all in this area. Use of identified vehicle routes would adversely affect opportunities for solitude.

WILDERNESS STUDY AREA 288A

Essex

GENERAL DESCRIPTION

The northeastern boundary of this area (16,100 acres)[1] is formed by the Old National Trails Highway (State Route 66). The western boundary is a mine access road which divides Piute Mountain. The southern border is defined by a ranch road, and the southeastern boundary is the Sunflower Springs Road. The area contains approximately eight sections of non-public land. There is a small tip of land in the extreme southeastern portion of the area that possibly has been contaminated by unexploded ordnance, a remnant of World War II maneuvers.

There are several recorded mining claims along the northeastern edge of the area. This WSA contains 40 percent alluvial fans, 40 percent mountains, 15 percent dissected fans, and 5 percent hills.

WILDERNESS QUALITY

Description of Environment

The site includes the southern end of the Piute Mountains and a large alluvial fan which stretches to the west to the community of Essex. The mountains, which comprise about one-third of the total area, are jagged, rugged, and colorful. Steep-walled canyons adjoin the washes and canyons which are found throughout. Highest terrain lies in the southern portion of the site and reaches an elevation of over 360 feet. Vegetation varies with elevation. At the lower elevations low shrubs dominate the scene. As the elevation increases, so does the variety of plant life. Creosote bush scrub is the visually dominant species, but, as the elevation increases, outstanding cactus displays (cholla, barrel, hedgehog) are abundant.

Natural Condition

Mining activities are evident along portions of the northern border. Claim markers and prospects indicate recent interest in the site. On the southeastern edge of the mountain, a ranch site is maintained in support of grazing activity. An operating windmill and watering system, in addition to a maintained dirt road, attest to the existing operation. The community of Essex is located in the extreme western portion of the area. This community, along with its associated ways and dumpsites, detracts from the naturalness of the area. The boundaries have been redefined to include only those areas containing wilderness values. The remainder of the area has retained its

[1]Portions of T. 7 N., Rs. 17 and 18 E.; and T. 8 N., Rs. 17 and 18 E., SBM.

primeval character and appears to have been affected primarily by natural forces.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Primitive character, variety, denseness of vegetation, and rugged mountain topography combine to ensure outstanding opportunities for solitude. In addition, diversity of the landscape affords numerous outstanding opportunities for a primitive type of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 114 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has known potential for limestone and potential for metals, uranium, thorium, and sand and gravel. Six unpatented claims are recorded.

Vegetation

No unusual plant assemblages occur within this WSA. Vegetation consists mostly of creosote bush scrub. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

The Piute Mountains include 10 square miles of transient desert bighorn sheep range used by the Old Woman Mountains bighorn sheep herd to the south. This WSA includes roughly 30 percent of the Piute Mountains transient range. A single spring is located along the southern portion of the Piute Mountains. The entire WSA falls within the Fenner-Chemehuevi Desert Tortoise Area, one of four recognized core areas in California for this species. Tortoise densities range from 20 to 50 animals per square mile. The extreme southern end of this WSA is used for foraging by a pair of prairie falcons, which nest in the northern Old Woman Mountains.

Cultural Resources

In the southwestern corner of this WSA is a 3-square-mile area of known very high cultural resource sensitivity. A main prehistoric occupation site and three non-related historical sites (mining claims) are located in this area near Barrel Spring. The aboriginal village is quite rare, with at least 2 meters of cultural deposit.

Native American Uses, Needs, and Sites

The entire eastern half of the Wilderness Study Area continues to be employed by Chemehuevi, Mohave, and Panamint Shoshone for mountain sheep and deer hunting and seasonal collection. Numerous large campsites, villages, and associated burials are found in this area.

Scenic Quality

The Piute Mountains contain a variety of landforms. Granitic formations such as spires and balancing rocks can be found throughout. Vegetation is dense, displaying a variety of cacti, yucca, and other shrubs and grasses. Differential erosion within the various rock types results in a variety of subtle colors. Intrusions are few and generally local in nature. Low, rolling hills and alluvial fans surround the mountain mass. Vegetation in the low elevations is sparse. Intrusions in the area are generally minor and local in nature. Vegetation received the highest possible rating.

General Recreation

Good quail and dove hunting opportunities exist within parts of this WSA. No other known recreation resources exist within this WSA.

Range Uses and Potential

The WSA is within the Lazy Daisy Allotment. The Piute Mountains Herd Management Area is partially within the WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments indicated rockhounding interest, potential for mineral development, unique ecological factors, and natural integrity of the landscape. The area was retained for further study.

Study Phase

Most of the nine comments on WSA 288A expressed multiple-use concerns for the area. The city of Needles opposed restriction of access to materials for flood-control for the city. The area is popular with rockhounds. Access is needed for railroad maintenance. Gold, silver, and copper mineralization exists, according to one comment. A transmission line, pipeline, and roads

require up to 2-1/2 mile pullback of boundaries. Oil, gas, and geothermal potential exists.

Support for wilderness designation included mention of stands of teddy bear cholla, among the best in the desert, and other outstanding cactus gardens.

No comments were received in response to the workbook.

Draft Plan Alternatives

No public comments specific to WSA 288A were received in response to the Draft Desert Plan Alternatives.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Essex Wilderness Study Area (288A) is recommended as nonsuitable for wilderness designation.

This study area ranked quite low (114) and did not possess any of the qualities that were identified as desert-wide wilderness opportunities. The area has known potential for limestone and potential for other minerals. The area offers good hunting opportunities. The area supports a transient bighorn sheep range, desert tortoise habitat, and foraging and nesting habitat for prairie falcons in the Old Woman Mountains.

The decision to recommend the area as nonsuitable was based on its low relative rating and the mineral potential. The area was recommended for Class M to allow access for mineral exploration and development and general recreation. A degree of protection will be provided for natural and cultural resources.

IMPACT OF PROPOSED PLAN

The Class M designation would result in moderate adverse impacts to wilderness values, which rated poor in this area. Mineral development would affect naturalness, while vehicular use of existing vehicle routes, which are few in number in this area, would adversely affect oppotunities for solitude.

WILDERNESS STUDY AREA 290

Bigelow Cholla Garden

GENERAL DESCRIPTION

The elongated triangular area (11,800 acres)[1] has as its northern border Interest 40. The southern border is a gas pipeline right of way. The short western boundary is a powerline right of way. The area is approximately 70 percent public lands; non-public holdings occur in north-south strips of alternating sections. A small portion of the area in the north-central portion has been withdrawn from public entry to protect the recreational and public values under Public Land Order 5224. This WSA contains 60 percent hills, 20 percent dissected fans, 10 percent alluvial fans, and 5 percent pediments.

WILDERNESS QUALITY

Description of Environement

The major landform feature of the area is the northern end of the Sacramento Mountains. Of major ecological significance is the largest concentration of Bigelow cholla in the California desert. The mountains consist of very dark rock of volcanic origin with several examples of volcanic dikes. Elevations in the area range from 1,400 feet in the sharply eroded bajada at the eastern end of the area to 3,314 feet at Bannock, the highest peak. Washes which bisect the mountains are heavily vegetated with ironwood and mesquite. The creosote bush scrub plant community, which dominates the bajada and alluvial formations, becomes a more sparsely vegetated shadscale scrub on the rocky, elevated slopes.

Natural Condition

Within the area there are very few structures which alter the primeval character of the land. The eastern and western boundaries of the area have been adjusted to exclude tracts of non-public land from wilderness consideration. A small prospect is located in the highly eroded bajada toward the eastern end along the southern border. This scar is very small and well screened by the irregular topography surrounding it. There are no roads or ways into the area to reduce the apparent naturalness and no noticeable scars from the use of motorized vehicles. The area appears to have been affected primarily by natural forces, as man's imprint is not evident upon the landscape. Vegetation in the area is in excellent condition, giving the appearance that the earth and its community of life are

[1]Portions of T. 8 N., R. 20 E.; and T. 9 N., Rs. 19, 20, and 21 E., SBM.

undisturbed by man. The private lands at the extreme eastern end and along the southwestern edge have been deleted.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The irregular volcanic rock formations and vegetative qualities of the area provide outstanding opportunities for solitude. Vegetative and topographic screening allow recreationists a feeling of isolation in a scenic desert setting. The lack of noticeable imprints of man upon the landscape afford outstanding opportunities for primitive and unconfined types of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 68 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for metals and sand and gravel. No claims are recorded.

Vegetation

A magnificent stand of teddy bear cholla occurs in WSA 290 near South Pass and extends into the Sacramento Mountains (WSA 292). The vegetation otherwise is composed mostly of creosote bush scrub. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

This area includes 4 square miles of desert tortoise habitat with densities of 20 to 50 tortoises per square mile. About 10 square miles of the area are prairie falcon foraging habitat.

Cultural Resources

No areas of known cultural resource sensitivity/significance are recorded in this unsurveyed area. Natural resources except mesquite offer little for prehistoric exploitation in this area.

Native American Uses, Needs, and Sites

The eastern half of the Wilderness Study Area has been used by Chemehuevi, Mohave, and Southern Ute through historic times. Various occupation sites, as well as areas of ritual and religious importance, are found in this area.

Scenic Quality

This area includes the northern end of the Sacramento Mountains; the scenic quality was rated "high." This is one of the few areas in the desert where the landform is dominated by its vegetation. Thousands of Bigelow cholla are grouped together to form a massive display of tan and yellow colors. Accented by darker backgrounds, the area provides a unique visual experience to the many travelers passing the area.

Outstanding factors contributing to the high rating were vegetation, lack of intrusions, uniqueness, and color.

General Recreation

This is the site of one of the most outstanding stands of the jumping cholla. Because of the thousands of cacti present in such dense masses, this area has been rated "high" for its interpretive qualities.

Hunting opportunities are rated as good for quail and rabbit in portions of this WSA.

Good floral observation opportunities exist in parts of this WSA.

Range Uses and Potential

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments indicated rockhounding interest, potential for mineral development, unique ecological factors, and natural integrity of the landscape. The area has been retained for further study.

Study Phase

Most of the nine comments on WSA 290 expressed multiple-use concerns for the area. The city of Needles opposed restriction of access to materials for flood-control for the city. The area is popular with rockhounds. Access is needed for railroad maintenance. Gold, silver, and copper mineralization exists, according to one comment. A transmission line, pipeline, and roads are bordering sights which require up to 2-1/2 mile pullback of boundaries. Oil, gas, and geothermal potential exists.

Support for wilderness designation includes mention of stands of teddy bear cholla, among the best in the desert, and other outstanding cactus gardens.

Several comments were received in response to the workbook. One recommended that the area be studied because the biological values are extremely important; management decisions should be carefully considered. Another commenter expressed the desire to open the area in part to rockhounds.

Draft Plan Alternatives

A public comment, recommending greater acreage in WSA 290 as suitable for wilderness under the Protection Alternative, was received in response to the Draft Desert Plan Alternatives.

IMPACT OF PROPOSED PLAN

The limited use associated with the Class L designation should have no substantial impact on the wilderness values of this study area. A very small portion of the study area, at the northeastern tip, is recommended for Class M. Mineral activities in this area would adversely impact the natural character of this small area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Bigelow Cholla Wilderness Study Area (290) is recommended as nonsuitable for wilderness designation.

This study area ranked about midway (68) in the relative ratings and does not possess the qualities identified as desert-wide wilderness opportunities. The competing resource values are also relatively low. The area has possible potential for metals and offers opportunities for interpretation, hunting, and floral displays. After weighing these and other values, it was decided that the highest and best use of the study area would be in a multiple-use category.

The study area was recommended for Class L to protect the natural and cultural resources and permit access for general recreation and mineral exploration and development.

WILDERNESS STUDY AREA 292

Sacramento Mountains

GENERAL DESCRIPTION

The area (60,750 acres)[1] is bounded on the south by gas pipelines and associated roads, on the west by a powerline corridor, on the north by another gas pipeline, Interstate 40, and the Santa Fe Railroad, and on the east by development around Needles and State Route 95.

Public lands comprise approximately 60 percent with non-public holdings occurring in north-south strips of alternate sections.

There is a Water and Power Resources Service construction materials site withdrawal for all of Section 18, T. 8 N., R. 22 E., SBM. There are mining claims in the extreme eastern edge of the area.

A major portion of the area has been possibly contaminated by unexploded military ordnance, a remnant of World War II maneuvers. This WSA contains 45 percent hills, 20 percent pediments, 15 percent mountains, 10 percent dissected fans, 8 percent alluvial fans, and 2 percent highly dissected fans.

WILDERNESS QUALTIY

Description of Environment

Approximately 75 percent of the area is in the Sacramento Moutains. To the east from the mountainous portion, a large, highly eroded bajada slopes toward the Colorado River. Other features are Ward Valley at the far western edge and a small section of the very northern end of the Chemehuevi Valley. Elevations range from 500 feet near Needles along the Colorado River to 3,308 feet on Eagle Peak. Vegetative types are a blend of high desert and Colorado Desert influences. Creosote bush scrub is the dominating plant community, with the exception of the eastern bajada where the highly alkaline soil supports a plant community more representative of shadscale scrub. Within the mountains are good stands of jumping cholla with several other cactus species represented. Ward Valley is a typical high desert creosote bush scrub community, while the northern Chemehuevi Valley has large areas of desert pavement and a Colorado Desert influence with scattered ocotillo.

Natural Condition

In some parts, permanent structures detract from the primeval character of the lands. South of Needles, but within the eastern border, is the Needles

[1]Portions of Ts. 7, 8, and 9 M., Rs. 20, 21, and 22 E., SBM.

Municipal Airport, which includes four sections of land. A main wash from a central canyon on the east side of the mountains is diverted away from the town of Needles by a series of flood control dikes. The natural flow of water is thus diverted south of Needles, creating potential impacts on the vegetation in the area. A maintained gravel road runs between Needles and these dikes and continues farther into the mountains to a quarry 2 miles east of Eagle Peak, near the center of the area. The imprint of man's work is substantially noticeable east of the mountains. The eastern bajada is laced with numerous roads, primitive ways, and vehicle tracks both in the washes and on the desert pavement areas between the washes. A utility line parallels the northern boundary from Needles northwestward. Access routes lead to mining activity on the northern end of the mountains and at the southeastern end. A portion of the area along the western boundary in Ward Valley contains mining activity with human habitations. At the southern end is a small communications site. Although portions of the area have been substantially altered by man, the large central portion retains its primeval character and remains undisturbed by man's activities. Evidence of past mining in the northwestern corner of the area does not significantly detract from the naturalness of the land due to vegetative and topographic screening.

The boundaries of the Wilderness Study Area are common with the northern roadless area boundary between Section 21 (T. 9 N., R. 21 E.) and the northern edge of Section 2 (T. 8 N., R. 20 E.). The western boundary extends southeast and parallels the roadless area boundary at a distance of 1 mile, then follows a wash northeast from Section 19 (T. 7 n., R. 22 E.) to Section 27 (T. 8 N., R. 22 E.). On the east, the boundary generally follows the base of the mountains, diverging only to exclude the quarry east of Eagle Pass. On the northeast, the boundary avoids the mining area by winding through Sections 21, 28, 27, 26, and 25 (T. 9 N., R. 21 E.) and Sections 30, 29, 32, 33, and 27 (T. 9 N., R. 22 E.).

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The area contains outstanding opportunities for solitude. These opportunities are offered in the Sacramento Mountains by the extremely irregular topography. The lower ridges of the mountains are laced with washes and small canyons which are heavily vegetated with ironwood and mesquite, providing both vegetative and topographic screening of visitors from one another. The terrain is irregular and scenic and of ample size to support outstanding opportunities for primitive and unconfined types of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 64 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for magnesite, barite, fluorite, metals (manganese, copper), and salable materials (rock, sand, gravel). No claims are recorded.

Vegetation

A magnificent stand of teddy bear cholla occurs in WSA 292. The vegetation otherwise is composed mostly of creosote bush scrub. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

About 38 percent (29 square miles) of this WSA is permanent range for the desert bighorn sheep. Another 20 square miles is seasonal range. This constitutes most (70%) of the total range for the Sacramento Mountains desert bighorn herd, estimated at 60 individuals. Nearly 7 percent of the area has 20 to 50 desert tortoises per square miles. All of the WSA is foraging area for prairie falcons, and two prairie falcon eyries occur in the area. Eight springs provide water for wildlife.

Cultural Resources

Several areas of cultural resources sensitivity/significance are located within this WSA.

Native American Uses, Needs, and Sites

The northern two-thirds of this WSA represents an area traditionally used by Chemehuevi, Mohave, and Southern Ute through historic times. Occupation, ritual, and religious sites are located within this area. Ethnographic boundaries separating the Mohave, Chemehuevi, and Serrano territories run along the eastern border of the WSA.

Scenic Quality

The Sacramento Mountains contain an interesting diversity of landform, vegetation, and color. The mountains are very rugged with much vertical variation, especially in those areas of volcanic origins. Vegetation includes at least three species of cactus and an interesting variety of other plants.

Eagle Peak and Flattop Mountain are considered as prominent regional landmarks. The area received outstanding ratings in landform, color, vegetation, and lack of intrusions. Topography at the base is low and rolling. Vegetation density and variety are high, and color is rich. Many intrusions exist in the foothills.

General Recreation

The Sacramento Mountains have been rated medium for their interpretive qualities. One teaching and research site, which receives up to four pre-college, college, or university visits annually, is within this WSA.

Range Uses and Potential

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments indicate that the mining in the northwestern Sacramento Mountains is substantially unnoticeable; numerous ways occur along the eastern bajada. The area contains mineral potential and unique ecological factors. Generally, the comments supported the boundaries drawn as a result of the findings.

Study Phase

Eleven of the 18 comments on WSA 292 expressed multiple-use concerns and problems with wilderness designation. Southern California Gas Company plans to build a 30-inch connecting pipeline between a compressor station near Topock and a compressor station near Needles to ensure continuity of service if one of its east-west lines is withdrawn from service, and also to correct load imbalances between the two lines. This proposed line is not in the roadless area of WSA 292 but may be affected by expansions of what is considered roadless area. Oil, gas, and geothermal potential exists in the area. Wilderness designation will affect private land holdings near the Needles Airport and other holdings as well. Mineralized deposits of gold, silver, copper, and magnesite are mentioned.

Support for wilderness designation included suggestions to expand the area to the east, where rehabilitation should be investigated, and to the northeast, which includes the fine smoke tree wash and which would complete protection of the Sacramento Mountains ecosystems.

Numerous comments were received in response to the workbook. The vast majority of comments were in favor of wilderness preservation and have expansion as a common theme. Few comments recommended maintaining existing use of the area.

Draft Plan Alternatives

A public comment specific to WSA 292 was received in response to the Draft Desert Plan Alternatives. The entire study area was suggested as suitable for wilderness under the Balanced Alternative.

RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 292, Sacramento Mountains, is recommended as nonsuitable for wilderness designation.

The WSA was rated 64 out of all the areas studied. The site did not contain any of the qualities identified as desert-wide wilderness opportunities. Considering the relatively low ranking and the low value of competing resources, it was determined that a multiple-use classification, which would permit access for mineral exploration and development, would be appropriate.

The need to protect the Sacramento Mountains bighorn sheep herd, tortoise populations, and prairie falcon eyries and foraging area, along with areas of ritual and religious significance to Native Americans was recognized. The area was recommended for Class L to accomplish this.

IMPACT OF PROPOSED PLAN

The Class L designation serves to protect the wilderness resources in this area. The limited use allowed under this designation would have no substantial impact on these wilderness resources.

WILDERNESS STUDY AREA 294

Stepladder Mountains

GENERAL DESCRIPTION

The area (132,960 acres)[1] is bounded to the west and northeast by a powerline corridor right of way, to the north by a gas/telephone line right of way, to the east by State Route 95, and to the southeast and south by a county-maintained road and a maintained mining road. The area is 81 percent public lands. Non-public holdings occur in alternating sections in the northern portion and in scattered sections in the southern portions. Three areas are possibly contaminated by unexploded military ordnance, a remnant of World War II military maneuvers. There are recorded mining claims in the extreme eastern point of the study area. This WSA contains 67 percent alluvial fans, 15 percent hills, 10 percent dissected fans, 5 percent pediments, and 3 percent riverwashes.

WILDERNESS QUALITY

Description of Environment

The area is very large and has varied topography, ranging from steep, jagged peaks near the southern end of the Stepladder Mountains to flat bajadas that slope eastward and westward from the main mountain mass. Steep, but more rounded hills make up the remainder of the Stepladder Mountains. Vegetative diversity is excellent and consists of cactus gardens in the northern portion of the mountains and ocotillo, Mohave yucca, creosote, and mixed shrubs throughout.

Natural Condition

The Stepladder Mountains are relatively undisturbed by man. The few primitive ways which cross the area are in extremely poor condition. All evidence of these ways is screened from the viewer at short distances by dense vegetation. Overall, the area appears to be affected primarily by natural forces. The boundaries of the Wilderness Study Area are common with the roadless area boundaries.

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[1]Portions of T. 4 N., Rs. 19, 20, 21 and 22 E.; T. 5 N., Rs. 19, 20, 21 and 22 E.; and T. 6 N., Rs. 19, 20, 20 and 21 E., SBM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Because of diverse topography in the highlands, extensive vegetated bajadas, and the lack of any noticeable impacts by man, the area contains outstanding opportunities for solitude, as well as for primitive and unconfined types of recreation. Doves, quail, and rabbits abound, providing opportunities for hunting. The bajadas, the rolling hills, and the higher mountains offer outstanding potential for a variety of primitive recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 70 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for metals, uranium, and oil and gas. Over 100 unpatented claims are recorded.

Vegetation

Two unusual plant assemblages, consisting of a dense stand of teddy bear cholla and a small aggregation of crucifixion thorn, occur in the Stepladder Mountains region. Otherwise, creosote bush scrub and desert microphyll woodland are the dominant vegetation components. Crucifixion thorn is considered sensitive. However, this species, while it is rare in California, is quite common in southern Arizona.

Wildlife

The Stepladder Mountains teddy bear cholla thicket provides a unique wildlife habitat for many species of birds and mammals. Chemehuevi Wash and its tributaries provide a rich and diverse habitat. Desert tortoises occur over most of the WSA. Significant populations of moderate to high densities are found over about 240 square miles: 45 square miles (6% of total), 100 to 250 animals per square mile; 145 square miles (10% of total), 50 to 100 per square mile; and 50 square miles (1% of total), 20 to 50 per square mile. The Stepladder Mountains (25 square miles) formerly contained bighorn sheep, but they do not inhabit the area now; 100 percent of this in the WSA. Prairie falcons and golden eagles forage over most of the area and are known

to breed here. Brazilian free-tailed bats have also been recorded in this area.

Cultural Resources

Approximately 4.5 square miles of known high sensitivity/significance are located within the center of this WSA.

Native American Uses, Needs, and Sites

The eastern part of the WSA represents an area of continuous use employed by Chemehuevi, Mohave, and Panamint Shoshone for hunting and collecting. The southern section of the WSA, near the Turtle Mountains, is an area of Chemehuevi village and burial sites associated with mountain sheep and deer hunting activities. The Chemehuevi trail cuts in an east-to-west direction across the extreme southern edge of the WSA.

Scenic Quality

The scenic quality of the east and west ends of this area were rated "low." The Stepladder Mountains in the central portion constitute a linear chain of small, residual mountains. Trending north-south with a major, steep, and craggy highland area in the center, they are bounded all around by lower, more rounded hills. Some color is displayed in the rock types between the central and southern portions. Vegetation is sparse at higher elevations and become more dense in the lower areas. The Bigelow cholla area in the northern area is of special interest. Highest-rated key factors are color and vegetation.

General Recreation

An excellent view westward can be had from the Snaggletooth Hills because of the geologic character of the landscape. These hills have been rated as medium for their interpretive qualities. Portions of this WSA contain excellent rockhounding opportunities. Agate, jasper, chalcedony, opalite, and sardonyx are among the material collected.

Range Uses and Potential

The WSA includes portions of the Lazy Daisy Allotment and the proposed Chemehuevi Allotment.

SUMMARY OF PUBLIC COMMENT

Inventory Phase

Comments generally agreed with the findings. Many others indicated recreational interest for rockhounding.

Study Phase

Of 14 comments on this area, most recommended multiple-use designation or deletion of the potential wilderness area. Area 294 contains 2,562 acres leased for grazing, according to one comment. Without the inclusion of private land holdings, the area contains less than 5,000 acres and should not be considered, according to another source; the arrangement of private land holdings effectively segregates some parts from the whole. Telephone, gas, and electric lines and their access roads, air traffic, adjoining road traffic, particularly during cattle-moving season, and vehicles using washes nullify wilderness qualities. Wilderness study designation would preclude exploration for mineral, oil and gas, and geothermal resources which potentially exist in this area. Hunting and rockhounding values exist in this area and vehicle access should be allowed for this and other recreation.

Wilderness study designation is urged by those who wish protection of scientific, educational, ecological, and geological values in the area. Among features cited are fine creosote flats and the upper reaches of Sacramento wash.

Several comments were received in response to the workbook. Some recommended multiple-use and boundary changes to enhance wilderness quality. Others opposed closing of the area north of the Turtles Mountains to rockhounds.

Draft Plan Alternatives

A variety of public comments specific to WSA 294 was received in response to the Draft Desert Plan Alternatives. Several comments agreed with the Protection Alternative. Other comments favored more wilderness than otherwise stated in the Protection Alternative, particularly adding Chemehuevi Valley to wilderness. Several comments disagreed with the Balanced Alternative. They recommended adding to the WSA the flanks of the Turtle Mountains and more non-mountainous wilderness. General comments included recommending the protection of wildlife by designating the area as wilderness.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Stepladder Mountains Wilderness Study Area (294) is recommended as nonsuitable for wilderness designation.

The area displays potential for metals, uranium, and oil and gas. Portions of the Lazy Daisy grazing allotment and the proposed Chemehuevi grazing allotment overlap this area. The area is a popular rockhound area and has been rated as excellent for this purpose.

The area ranked 70 and did not possess the qualities identified by the desert-wide wilderness objectives.

The area supports various natural and cultural resources. It was decided to recommend the eastern two thirds (approximately) for Class L designation.

This would protect the largest part of the prairie falcon and golden eagle foraging area and the most significant Native American area. The unusual plant assemblages would also be protected. The western portion is recommended for Class M designation to provide access for mineral exploration and more intense recreation.

IMPACT OF PROPOSED PLAN

The Class L designation would have only slightly adverse impacts on wilderness values. The controlled mineral development allowed under this designation would adversely impact naturalness, while vehicle access would disrupt opportunities for solitude.

The Class M designation along the western edge of the area provides for less controlled mineral exploration and development and for oil and gas exploration and development. These activities would have a moderately adverse impact on naturalness, especially in this particular area of little relief. Opportunities for solitude would be impacted by use of existing vehicle routes.

WILDERNESS STUDY AREA 295

Pilot Peak

GENERAL DESCRIPTION

This area (49,100 acres)[1] includes the Little Piute Mountains. It is bordered on the north by a gas pipeline right of way and associated road, on the east by a powerline right of way, and on the southwest by Sunflower Springs Road. Approximately 40 percent of this area is composed of non-public land in north-south strips of random placement. There is a small public water reserve in the east central area. Approximately 16 sections in the northern portions of the study area have been possibly contaminated by unexploded military ordnance, a remnant of World War II maneuvers. There are recorded mining claims in the southern portion of the study area. This WSA contains 50 percent alluvial fans, 25 percent hills, 20 percent pediments, and 5 percent dissected fans.

WILDERNESS QUALTIY

Description Of Environment

The topography of the area is very diverse. The Little Piute Mountains are a relatively low range dominating the northeastern area. The mountains rise abruptly from the west and contain two large upland valleys. South of the Little Piute Mountains is a large, gently sloping bajada of lighter colored sand. In the extreme southern corner are three uplifted rises, the dominant one being Pilot Peak. The bajadas are cut from east to west by four large washes. West from the Little Piutes is a large, gently sloping valley and the last vestiges of the Old Woman Mountains. The dominant plants are creosote bush scrub and brittlebush. Other associated shrubs and many annuals are also present. In the flatter areas, Joshua trees and varieties of cholla cactus are present.

Natural Condition

The area is essentially in a primitive and natural condition. A few prospects are located near the point where Big Wash crosses Sunflower Springs Road. However, because of the hill immediately east of this area, they are topographically screened from the rest of the area. Hence, the effect on the naturalness of the land is minimal. There is also a primitive way which runs down the western side of the Little Piute Mountains and around the southern tip. Because of the thickness of vegetation, the impact of this unmaintained

[1]Portions of T. 5 N., R. 18 E.; T. 6 N., Rs. 17, 18, and 19 E.; and T. 7 N., Rs. 17, 18, and 19 E., SBM.

way is minimal. The area remains in a pristine natural form, free of permanent structures and the works of man.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Outstanding opportunities for solitude are numerous. Vegetational and topographic screening throughout provide excellent cover which screens visitors from one another. Because of the variety of terrain, outstanding opportunities for primitive and unconfined types of recreation are excellent.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 106 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for metals, uranium, limestone, and oil and gas (eastern quarter). There are 67 unpatented claims recorded.

Vegetation

No unusual plant assemblanges occur within WSA 295. Vegetation consists mostly of creosote bush scrub and desert microphyll woodland. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

Five square miles of desert bighorn sheep transient range are present. This includes the entire transient bighorn sheep range in the Little Piute Mountains. There are 34 square miles of desert tortoise habitat, with densities of 20 to 50 tortoises per square mile, and 42 square miles of habitat with tortoise densities of 50 to 100 per square mile. The WSA also comprises 72 square miles of the Fenner-Chemehuevi Desert Tortoise Core Area. There are 45 square miles of prairie falcon foraging habitat and one eyrie. Two important springs are in the southwestern portion of the WSA.

Cultural Resources

Within this WSA are three areas of known cultural resources sensitivity.

Native American Uses, Needs, and Sites

The entire WSA represents an area which continues to be employed by some Chemehuevi, Mohave, and Panamint Shoshone for mountain sheep and deer hunting as well as for seasonal collection. Various villages, campsites, and associated burials are scattered throughout this territory. A specific antelope and deer hunting locale, used until 1926 by Chemehuevi, lies in the southern portion of the WSA.

Scenic Quality

This area includes the northern extension of the Old Woman and Little Piute Mountains. Generally the borders enclose an area of low hills with very mixed geologic compositions, giving it a variety of landforms and colors. Vegetation is sparse on the hills, but of medium density in the washes. Vegetation is varied and includes cactus, yucca, smoke tree, and dry grasses. The area was rated "medium" with no outstanding single factors.

General Recreation

A small portion of this WSA is within a designated Natural Environment Area. No other known recreation resources exist in this WSA.

Range Uses and Potential

The WSA is within the Lazy Daisy Allotment.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments pertaining to inventory criteria supported the findings. Other comments addressed study phase considerations.

Study Phase

About four dozen comments addressed WSA 295, with a small majority favoring wilderness designation. The scenic qualities of the mountains were praised; they are composed of marble that forms spectacular pinnacles and cliffs. It was recommended that an extensive land exchange in the desert should occur so that wilderness areas can be managed properly. Potential WSAs should not be excluded because of motorized vehicle use.

Multiple-use management for the area should occur, some writers said, for mining, grazing, and recreation. Copper, tungsten, mercury, lead, gold, and silver can be mined here. Within the area, 2,560 acres are leased for grazing. Rockhounds want access to search for vaughn marble, onyx, orbicular jasper, and other gemstones. A boundary adjustment of a withdrawal of up to 2-1/2 miles from transmission lines and roads which border the area should be made.

No comments were received in response to the workbook.

Draft Plan Alternatives

No public comments specific to WSA 295 were received in response to the Draft Desert Plan Alternatives.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Pilot Peak Wilderness Study Area (295) is recommended as nonsuitable for wilderness designation.

The area was rated low (106) and did not possess any qualities identified as desert-wide wilderness opportunities. The study area displays potential for metals, uranium, limestone, and oil and gas and falls within the Lazy Daisy grazing allotment. Recognizing the low resource values and the low wilderness rating, it was decided that the highest and best use of the area would be for purposes other than wilderness.

The area was recommended for Class L. This classification would permit access for mineral exploration and development while protecting the natural and cultural values. This WSA contains bighorn sheep habitat, tortoise populations, and other wildlife, in addition to springs and three areas of known cultural resource sensitivity. All of these resources would be protected under this designation.

IMPACT OF PROPOSED PLAN

The Class L designation affords some protection while allowing limited mineral development and access on designated vehicle routes. Mineral development would have an adverse impact on naturalness, while vehicular access would adversely affect opportunities for solitude. However, with the wilderness values of this area rating low, the over-all impact on these values would not be significant.

WILDERNESS STUDY AREA 299

Old Woman Mountains

GENERAL DESCRIPTION

The northwestern boundary of this roadless area (134,400 acres)[1] parallels a pipeline right of way and maintained road. The western boundary parallels a mining access road. To the south, the boundary consists of a railroad. The eastern boundary is a transmission line corridor right of way and access road, and the northeastern boundary parallels a maintained road. The area includes approximately 58 sections of non-public land in a north-south orientation accounting for approximately 25 percent of the total land area. There are a number of recorded mining claims in the northern portion of the area. The area has two regions, one in the north and one in the south, which are possibly contaminated by unexploded military ordnance, a remnant of World War II military maneuvers. This WSA contains 35 percent alluvial fans, 35 percent mountains, 13 percent sand covered fans, 10 percent dissected fans, 5 percent hills, and 2 percent pediments.

WILDERNESS QUALITY

Description of Environment

This roadless area is characterized by a large, expansive creosote-covered bajada and by the massive, fault-lifted Old Woman Mountains. Numerous canyons and washes penetrate this rocky, rough mountain system. Wide varieties of vegetation are found in this area, including yucca, nolinas, barrel cactus, and juniper on the higher slopes. Steep spires and rock walls, as well as the Old Woman statue natural rock formation, dominate the north-central portion.

Natural Condition

The majority of this roadless area is affected primarily by natural forces, with man's work substantially unnoticeable. The undeveloped land retains its primeval character and influence. The northern portion of this roadless area has been excluded from those areas which contain wilderness values. This area contains permanent structures, such as mines and associated tailings, pits, prospect holes, and houses. All of these significantly degrade this portion. Man's work is substantially noticeable. Active mining operations and roads have also been excluded along the western portion of this roadless area. Cabins, mobile homes, bulldozed roads, mines, and mine tailings all detract from the primeval character of the land. These areas are fairly

[1]Portions of Ts. 2, 3, 4, 5 and 6 N., Rs. 16, 17 and 18 E., SBM.

isolated, however; thus the majority of this large roadless area still remains largely unaffected by man's works. The boundaries of the Wilderness Study Area exclude permanent facilities and their access in Carbonate Gulch, Scanlon Gulch, and Brown's Wash. The study area boundary is drawn to exclude the entire area east and north of: the spring 1-1/2 miles west of Painted Rock; the spring and mining activity 2 miles west of Sunflower Spring; Paramount Spring; Sweetwater Spring; Willow Springs; and the Florence mine.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

This large and diverse roadless area contains outstanding opportunities for solitude or a primitive and unconfined type of recreation. The wide open spaces of the bajadas and interim valleys with views towards the Turtle Mountains, Stepladder Mountains, and Ship Mountains add to the feeling of spaciousness and unconfinement. The numerous narrow canyons, rocky and steep ridges and peaks, and stands of juniper all tend to screen visitors from sight of one another. The majority of this area allows freedom of movement.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 45 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has known potential for tungsten and possible potential for other metals (gold, silver, lead, mercury, antimony), limestone, and uranium. About 20 unpatented claims are recorded.

Vegetation

No unusual plant assemblages are located within this WSA. Vegetation is made up primarily of creosote bush scrub and desert microphyll woodland on the bajadas and planes and pinyon pine woodland on the upper slopes of the Old Woman Mountains. No rare or threatened or endangered plant species are known to occur within WSA 299.

Wildlife

The abundant supply of water in this mountain range, consisting of at least 16 springs, supports a herd of desert bighorn sheep which numbers approximately 45 individuals. The WSA includes 30 square miles of bighorn permanent range and 100 square miles of seasonal range. This represents 85 percent of the entire range for the Old Woman Mountains herd. Approximately 120 square miles of this same area is used by mule deer.

Desert tortoises are present on valley floors in 27 square miles of this WSA at densities of 20 to 50 animals per square mile. This includes 3 square miles of the Fenner-Chemehuevi Desert Tortoise Area, one of four core populations recognized in California.

Cultural Resources

Several areas of known cultural resources sensitivity/significance are located within this proposed WSA.

Native American Uses, Needs, and Sites

The entire central part of the WSA, the Old Woman Mountains, is an area of continuous use by some Chemehuevi, Mohave, and Panamint Shoshone for mountain sheep and deer hunting as well as for seasonal collection. Various village and campsites with associated burials are scattered throughout the range. There are locales within the Old Woman Mountains which are referred to in myths. A Serrano Mojave boundary runs along the southwestern portion of WSA.

Scenic Quality

This unit corresponds with scenic quality V32, V30, and V27. These areas rated as high, medium, and low, respectively. Included within the area are the Old Woman Mountains which rise abruptly from the surrounding area displaying many massive, highly eroded surfaces. Deep canyons, washes, and interior valleys are scattered throughout. Outstanding varieties of vegetation exist within the many enclosed valleys. The surrounding valleys offer low-rolling, smooth landforms dissected by many shallow washes, with little vegetative variety. The mountains were rated extremely high in landform, vegetation, and above average in uniqueness and color.

General Recreation

The Old Woman Mountains are ranked medium as an interpretive resource. Good quail, chukar, and deer hunting opportunities exist in this WSA. A portion of this WSA is designated as a Natural Environment Area. An historic cultural site is also located in this area.

Range Uses and POtential

The WSA contains a portion of the Lazy Daisy Allotment.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments show general agreement with the findings. Many specific roads and mining activities were delineated. These are reflected in the wilderness study area borders.

Study Phase

Many of the 34 letters received concerning WSA 299 discussed 2(c) inventory criteria in reference to roads and mines. A variety of multiple-use considerations were mentioned, including energy and mining, recreation, and railroad maintenance. The area has potential for geothermal resources and mineralization including copper, tungsten, lead, gold, and silver. Rockhounds collect quartz crystals, marble, and trilobites. The Old Woman Mountains is a favorite area for these rockhounds and other recreationists who require motorized vehicles. One commenter stated that more land is needed for recreation in the State, not less. Additionally, railroad maintenance crews require access for flood control, derailment repair, and dike maintenance. Wilderness designation would curtail many of these activities.

Another reason given for opposing wilderness designation of WSA 299 is the presence of private land, which bisects the area from north to south and which constitutes a large percentage of the total WSA--there are less than 5,000 contiguous acres of public land. Other factors detracting from wilderness quality include the use of the area by military artillery in the past; the railroad, which borders the WSA; the transmission line and roads which cross the area; and the presence of a salt plant and landing field.

Letters supporting wilderness designation of the area cited recreational, scientific, geologic, and natural values in the area. Washes provide excellent trails for hiking to more remote areas. Rugged hiking in the Old Woman Mountains offers spectacular views of the desert and good campsites. Historic mines (1989-1902) are worthy of visits and other cultural resources exist throughout the area. Wildlife, including bighorn sheep and scenic values were mentioned. Several commenters recommended adding the excluded northeast portion of the WSA because the historic mining, geologic features, and natural values are worthy of wilderness designation.

One comment on WSA 299 received in response to the workbook recommended the limited-use designation for this WSA.

Desert Plan Alternatives

Several public comments specific to WSA 299 were received in response to the Draft Desert Plan Alternatives. One wanted more wilderness designated in this WSA. Another disagreed with the Balanced Alternative. General comments included the belief that exploration for and development of oil, gas, and

geothermal resources under the No Action Alternative is the best use for this WSA.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 299, Old Woman Mountains, is recommended as nonsuitable for wilderness designation.

Although the study area ranked relatively high (45), it was decided that the value of the known and possible potential for mineral development and opportunities for increased general recreation outweighed the area's value as wilderness. The area did not possess the qualities identified in the desert-wide wilderness objectives.

The WSA supports various natural and cultural values. Areas of bighorn and tortoise populations, in addition to known areas of cultural resource sensitivity, have been identified. It also includes areas in the Old Woman Mountains of high Native American values.

To protect these values, the WSA has been recommended for Class L. The guidelines would allow access for mineral exploration and limited motorized recreation.

IMPACT OF PROPOSED PLAN

The Class L designation would provide access on designated vehicle routes for rockhounding, other recreation, mineral development, and grazing development. Mineral and grazing developments, especially in the flat, open valley areas, will adversely affect the natural character of the area. Vehicle access will negatively impact opportunities for solitude in the area, especially in the interior valley on the eastern side of the main ridge, should the vehicle route entering the valley be designated as open to travel.

The eastern edge of the area is recommended for Class M, providing access on identified vehicle routes. Such use will have little impact on wilderness values in this particular area because few vehicle routes exist there.

WILDERNESS STUDY AREA 300

Ship Mountains

GENERAL DESCRIPTION

The area (23,850 acres)[1] includes the Ship Mountains. It is bordered on the northwest by a gas pipeline right of way and road, on the southwest by a railroad line, and on the east by a mining access road from Danby to Chubbuck which serves as access to mines located on the western slopes of the Old Woman Mountains. About 30 percent of this area is non-public land in random, scattered north-south strips. There have been a number of recorded mining claims in the northern and eastern portions of the area. This WSA contains 40 percent sand-covered fans, 20 percent alluvial fans, 15 percent mountains, 15 percent dissected fans, and 10 percent hills.

WILDERNESS QUALITY

Description of Environment

Topography includes the long, sandy, gently sloping bajadas on the east and west of the Ship Mountains, as well as the mountains themselves. The mountains have many deep canyons, rises, flat-topped buttes, crags, and spires. The eastern side is particularly impressive. The northeast corner of the range shows evidence of block-tilted hills and some sand in the form of forerunners to dunes. The northern mountains have an upland valley proceeding south. Vegetation varies with the substrata and elevation. Some of the lower sandy areas support only a sparse growth of annual grasses, while the bajadas are dominated by creosote bush scrub. The slopes show little vegetation other than an occasional clump of brittle bush.

Natural Condition

Several mines, including the Vulcan, are found in the upland valley of the north end of the mountains. It appears as though no mining activity is currently taking place. All the mines are confined to this valley; roads and ways are also present. There are enough facilities to warrant dropping the valley from further consideration as wilderness. Two other mine tunnels are located on the western slopes of the Ship Mountains. The impact of these mines on the natural condition of the area is negligible. Most of the area has no facilities or permanent structures and is comprised of undeveloped land which has retained its primeval characteristics. This untrammeled area is primarily affected by natural forces.

[1]Portions of Ts. 3, 4 and 5 N., Rs. 14, 15 and 16 E., SBM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Outstanding opportunities for solitude exist in most of the area. The roughness of the mountainous terrain, as well as the size of the bajadas, serves to screen visitors from one another. Vegetation on the bajadas also tends to isolate visitors. Many varieties of primitive recreation are available in this area. The area is large enough to allow freedom of movement for unconfined recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 113 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for iron and other metals, limestone, and silica. Ten claims are recorded.

Vegetation

No unusual plant assemblages occur within WSA 300. Vegetation consists mostly of creosote bush scrub and desert microphyll woodland. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

Wildlife values include 14 square miles of transient bighorn sheep range. This represents 85 percent of the bighorn range in the Ship Mountains.

Cultural Resources

One square mile of high sensitivity/significance is located within this WSA. Resources include Archer Station, an historic railroad siding.

Native American Uses, Needs, and Sites

This WSA contains few documented Native American resources. A Serrano-Mohave ethonographic boundary through the entire southern part of the wilderness area indicates this was territory used by both groups.

Scenic Quality

This area has an over-all scenic quality rating of "medium." The two primary components of this site are the Ship Mountains and a small portion of Cadiz Valley.

The Ship Mountains rise abruptly from the flat valley floor. Their steep sides and isolation give them the appearance of height that can be deceiving. Vegetation is sparse at higher elevations but is more dense and diverse lower and near washes.

The vast Cadiz and Ward Valleys provide little in the way of visual support within the area. All scenic quality factors were rated as medium or lower.

General Recreation

The Ship Mountains mineral area is ranked "low" for its interpretive values. No other known recreational resources exist in this WSA.

Range Uses and Potential

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENT

Inventory Phase

Comments supported the findings and also identified mineral potential and possible energy exploration.

Study Phase

Most of the nine comments about the Ship Mountains WSA did not support wilderness designation for the area. Geothermal potential exists, as well as mineralization; new iron deposits were mentioned. Private land patterns create an area of public land less than 5,000 acres, the minimum required under FLPMA for wilderness. Railroad maintenance crews may need access for flood control and derailment work. Bordering railroads, roads, and pipelines have a zone of influence nullifying wilderness qualities for up to 2-1/2 miles into the area.

In support of WSA designation, some noted the area's springs and washes that provide good wildlife habitat. The area has scenic vistas overlooking bajadas. Archaeological values are present.

One comment on WSA 300, received in response to the workbook, recommended placing the area in the "Little Use" category -- the "open" and "closed" categories were considered too stringent.

Draft Plan Alternatives

A few Public Comments, specific to WSA 300, were received in response to the Draft Desert Plan Alternatives. One agreed with the Protection Alternative. Another disagreed with the Balanced Alternative and wanted this WSA added.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 300, Ship Mountains, is recommended as nonsuitable for wilderness designation.

This area ranked low in relative wilderness values and did not possess any qualities identified in the desert-wide wilderness objectives. Although the competing mineral and recreation values are considered to be low, it was determined that, generally, they exceeded the wilderness value. The area is recommended for Class M designation to provide access for mineral exploration and development and motorized recreation activity.

IMPACT OF PROPOSED PLAN

The Class M designation provides for access on identified vehicle routes for mineral exploration and development, including oil and gas, and for recreation. Vehicular access would impair opportunities for solitude, and mineral development would adversely impact naturalness. Impacts to wilderness would not be highly significant, though, since the wilderness values rated poor over-all.

WILDERNESS STUDY AREA 304

Cleghorn Lakes

GENERAL DESCRIPTION

This area (33,640 acres)[1] has an odd shape because of its location adjacent to the Marine Corps Base at Twentynine Palms, which forms the western boundary. Other boundaries include a graded road into the military base to the north and Amboy Road to the east. The southern border is a telephone line support road. The area is approximately 80 percent public land. Non-public holdings occur in a checkerboard pattern near the eastern border, with scattered sections in the western half. There has been an invasion of the site by the location of several recorded mining claims in the southeast corner of the area. This WSA contains 40 percent alluvial fans, 25 percent mountains, 20 percent hills, 10 percent dissected fans, and 5 percent pediments. Most soils in this WSA are highly sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

Landforms in the Bullion Mountains vary with rock type. The mountains contain both rugged, boulder-type, granitic rocks and the more rounded metamorphic rocks. A large alluvial apron slopes eastward and westward on each side of the mountains. In the spring, the Cleghorn Lakes in the interior of the Bullion Mountains are densely covered with fiddleneck. The rest of the area has a sparse cover of vegetation consisting mostly of cholla, creosote bush, and mixed shrubs.

Natural Condition

The Bullion Mountains generally retain their natural character throughout. Terrain variation in the mountain area and the over-all size of the area screen out the influences of the few man-made features located within it. These features include a few primitive ways (one leading to the Cleghorn Lakes and a few in the Twentynine Palms area) and abandoned mines (including the Copper World mine, of which only scattered debris remains). Overall, man's influence in the area is substantially unnoticeable. Excluded from further wilderness consideration is the area around Valley Mountain where scattered mining in the interior has reduced the apparent naturalness. Around the mountain, large areas have been substantially altered by motorized vehicle use. The boundary runs through the center of the large wash at the base of the Bullion Mountain bajada, from the northwest corner of Section 2

[1]Portions of T. 2 N., Rs. 10, 11 and 12 E., SBM.

(T. 2 N., R. 10 E.) to the southern end of Section 33 (T. 2 N., R. 11 E.). The narrow strip between Amboy Road and the Marine base boundary is also excluded.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Outstanding opportunities for solitude and for a primitive and unconfined type of recreation occur within the area, especially in those portions where terrain variety provides visual screening. With both mountain and valley types of terrain in the area, primitive-type recreation experiences can be either of the intimate, enclosed type or of the vast, open type. Opportunities for solitude are lacking in the small strip between Amboy Road and the Marine base boundary. No vegetative or topographic screening is available there.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 82 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has possible potential for iron and other metals and uranium. About 20 unpatented claims are recorded.

Vegetation

No unusual plant assemblages occur within WSA 304. Vegetation consists mostly of creosote bush scrub. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

There are 14 square miles of seasonal bighorn sheep range and 11 square miles of permanent bighorn range in the Bullion Mountains. This includes 50 percent of the entire range of the herd and 100 percent of the herd's permanent range. The herd is estimated to number three individuals and is thought to be declining. There are also 3 square miles of desert tortoise habitat in this WSA with tortoise densities of 20 to 50 individuals per square mile.

Cultural Resources

No areas of known cultural resources sensitivity are located within this WSA. Although historic mining is known for the area, the activities were fairly recent or merely exploratory. Site density in this area will likely not exceed two sites per square mile on the average.

Native American Uses, Needs, and Sites

No Native American resources have been documented for this WSA. This area has been traditionally used by the Cahuilla and Serrano. Potential resources can be anticipated in the southern reaches of the Bullion Mountains and the western slopes of the Sheep Hole Mountains.

Scenic Quality

The major portion of this polygon is covered by scenic quality polygon T.P. 39, generally the area of the Bullion Mountains which lies out of the military reservation. The combination of low rolling hills and massive metamorphic mountains enclosing Cleghorn Lakes provides a unique setting. The lakebed area is the focal point of the scenery. Dense green cover provides a lawn-like area when it is viewed from a distance. Many species of vegetation thrive in the area. The only discernible scar in the area is a mine shaft and earth mound in the lakebed. Factors of special note in the evaluation form were vegetation and uniqueness.

General Recreation

No known recreation resources exist in this WSA.

Range Uses and Potential

There are no known range resources in this WSA.

SUMMARY OF PUBLIC COMMENT

Inventory Phase

Comments supported the findings and indicated potential for mineral and energy exploration.

Study Phase

Most of the dozen comments about WSA 304 supported multiple-use designation of the area. Personnel at Twentynine Palms Marine Corps Base said that the visitors to this area noted ground tremors, noise, and dust pollution from base activities. Also, WSA designation might reduce the effectiveness of training activities. The Amboy Road and telephone line access road intruded on wilderness solitude and naturalness for up to 2 miles into the area. Private land patterns create a contiguous public land area of less than 5,000 acres, less than the minimum required by FLPMA. Mining interests urged

limiting wilderness designation to Areas of Critical Environment Concern and allowing meaningful mineral exploration and extraction in areas otherwise withdrawn from multiple use.

Some comments supported wilderness designation -- the Marine Corps base is a good buffer to protect the area's natural values and Cleghorn Lakes are a unique ecological feature in the area. One commenter recommended expansion of the area considered for wilderness to the west and to just north of Valley Mountain to make the area more manageable.

One comment was received in response to the workbook. It recommended maintaining existing use because military maneuvers decrease the quality of wilderness in areas near the base.

Draft Plan Alternatives

A variety of public comments, specific to WSA 304, was received in response to the Draft Desert Plan Alternatives. One commenter agreed with the Protection Alternative. Several others wanted more wilderness than was recommended in the Protection Alternative (Iron Mountains, Cadiz Valley). Several other commenters disagreed with the Balanced Alternative and suggested adding the Sheephole Mountains WSA. General comments included the opinion that exploration for and development of oil, gas, and geothermal resources under the No Action Alternative would be the best use of the WSA.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Cleghorn Lakes Wilderness Study Area (304) is recommended as nonsuitable for wilderness designation.

This Wilderness Study Area rated in the lower half (81) of all the WSAs and did not possess the qualities identified in the desert-wide wilderness objectives. Although the competing mineral and resource values are considered to be low, it was determined that they exceeded the wilderness value.

It was recommended that the eastern 70 percent (approximately) be designated as Class L to protect the natural and cultural resources. The western and southern areas are recommended for Class M designation to allow recreation access and mineral exploration.

IMPACT OF PROPOSED PLAN

The Class L designation, which covers most of the study area, allows for mineral exploration and development. The limited development allowed under the guidelines, combined with the variable topography, results in low adverse impacts to naturalness.

The outer bajada is designated Class M, providing for exploration and development of minerals and vehicle use of existing ways. Such use of this

relatively open country could adversely affect the wilderness values, which are rated only fair.

WILDERNESS STUDY AREA 304A

Amboy Crater

GENERAL DESCRIPTION

The western boundary of this area (22,400 acres)[1] consists of a military base right of way south from Bagdad and Twentynine Palms Marine Corps Base. The southern boundary is a combination of the Marine Corps base and a road running west. The southern boundary is a combination of the Marine Corps base and a road running west from BM 607 in Section 9, T. 4 N., R. 12 E., at Amboy Road. The eastern border is Amboy Road. The northern boundary is State Route 66. The area is approximately 60 percent public land. Private sections occur in strips but do not interrupt the contiguous block of public land. There has been an invasion of the southern half of the area by the location of several recorded mining claims. This WSA contains 60 percent lava flows, 15 percent playas, 15 percent alluvial fans, and 10 percent plains. Most soils in the WSA have low sensitivity to surface disturbances.

WILDERNESS QUALITY

Description of Environment

The area is dominated by Amboy Crater, a volcanic cinder cone, which is surrounded by extensive lava flows. The cinder cone and lava flows rest upon the lower portion of a relatively flat bajada. Vegetation is sparsely distributed on the bajada and even more scarce on the lava flows. Creosote and mixed scrubs dominate the area.

Natural Condition

The eastern boundary of the Wilderness Study Area has been adjusted to exclude the salt extraction operation located on Bristol Dry Lake and random motorized vehicle scars adjacent to the highway. The remainder of the area generally retains its primeval character. Man's works, which include a few unimproved ways and random tank tracks from military activity extending outside the boundaries of the Marine base, are substantially unnoticeable because of topographic variation in the lava flows and distance on the bajadas. There has been no mining of the cinder cone, so it remains relatively intact.

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[1]Portions of T. 4 N., Rs. 11 and 12 E.; T. 5 N., Rs. 11 and 12 E.; and T. 6 N., R. 10 E., SBM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Outstanding opportunities for solitude and for primitive and unconfined types of recreation are provided within the area, especially in those portions where the terrain varies enough to screen out the outside influences and to screen users from each other. The cinder cone and lava flow area provide excellent opportunities for education and study.

Amboy Crater, one of the few easily accessible cinder cones that has not been disturbed by cinder mining activity, has both geological and educational significance.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 50 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for cinders, geothermal energy, sodium, calcium, and strontium. A block of 131 unpatented claims extends into the south-central portion of the WSA.

Vegetation

No unusual plant assemblages occur within WSA 304A. Vegetation consists mostly of creosote bush scrub and allscale scrub. No sensitive or significant plant species are known to occur in WSA 304A.

Wildlife

No significant wildlife values have been identified within this area.

Cultural Resources

A portion of this WSA falls within an area of known very high cultural resources sensitivity/significance.

Native American Uses, Needs, and Sites

No known Native American resources have been documented for WSA. This area was used traditionally by the Chemehuevi. Potential resources are estimated to be minimal, other than scattered campsites near possible salt collection zones.

Scenic Quality

The main feature of this area is Amboy Crater. This steep-sided, black cinder cone is surrounded by a large mass of low lava flows. Vegetation is sparse on the lava flow and nonexistent on the cone. Color variety is provided by blown sand against the black surfaces. Intrusions are not significant and limited to ways in the flows and paths on the cone. The main feature in the surrounding area is Bristol Dry Lake. This portion also lacks color contrast and vegetation. The lakebed is heavily intruded as a result of extensive mining operations. Flatness and lack of screening amplify the impact of the intrusions.

General Recreation

Amboy Crater, an interpretive site, is rated "high" for its interpretive qualities.

One teaching and research site is located at Amboy Crater. A popular site, it receives eight or more visits annually from pre-college, college, and university classes.

Range Uses and Potential

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENT

Inventory Phase

Comments supported inclusion of the area due to the unique geological features.

Study Phase

Eight of the 14 comments about WSA 304A favored a multiple-use designation for the following reasons: geothermal potential should be explored and developed; private land patterns create a public land area of less than 5,000 acres; mineralization may exist, wilderness designation should not occur until this is known; and the bordering roads have a zone of influence which nullifies wilderness qualities for up to 2-1/2 miles into the area. Other sight and sound intrusions mentioned are the landing field near Amboy and the AT&SF Railroad; and the activities of the Marine Corps Base which causes ground tremors, noise, and dust pollution. Concern was expressed that

a wilderness area bordering the Marine Corps base would constrict the effectiveness of training at the base.

Supporters of wilderness designation mention the unique geology, flora, and fauna of the area. The scenic, scientific, and educational values of this area of recent volcanic activity are high; the evidence of adaptive evolution in the dark reptiles of the black substrate is also mentioned. According to other commenters, manageability of the area is facilitated by road and military base boundaries. Access on foot is easy from nearby roads. Management of the area as an ecological study area was recommended as an alternative to wilderness designation.

One comment received in response to the workbook recommended excluding this WSA from further consideration as wilderness because military manuevers degrade wilderness quality around the area.

Draft Plan Alternatives

A variety of public comments specific to WSA 304A was received in response to the Draft Desert Plan Alternatives. One agreed with the Protection Alternative. Several wanted more wilderness than was otherwise recommended in the Protection Alternative (Iron Mountains, Cadiz Valley). Several commenters disagreed with the Balanced Alternative and recommended adding the Sheephole Mountains WSA. General comments included the opinion that exploration for and development of oil, gas, and geothermal resources under the No Action Alternative is the best use of this WSA.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 304A, Amboy Crater, is recommended as nonsuitable for wilderness designation.

Amboy Crater WSA has basically three resource attractions: a potential for mineral and geothermal development; areas of very high cultural resource sensitivity/significance; and a high value for recreation, teaching, research, and interpretation.

The recommended classification for this WSA is approximately 80 percent as Class L and 20 percent as Class I.

It was decided that the recreation value exceeded the wilderness value and that the Class L designation would permit restricted vehicular access for recreational purposes but would protect the important cultural resources. The Class I designation in the south-central portion would encompass an area where over 100 unpatented claims are located, as well as a large portion of private land. This would allow development without endangering any sensitive resources.

IMPACT OF PROPOSED PLAN

Most of the study area is recommended for Class L to provide some protection to the wilderness values and the geologic values associated with the cinder cone. Use in accordance with the Class L guidelines would have a slightly negative impact on wilderness values, since vehicle use on designated routes would impair opportunities for solitude in the small, relatively open study area.

A portion of the study area falls within Class I, which provides for intensive mining activity. Such activity would have a high adverse impact on the natural character of the area and would influence naturalness and opportunities for solitude in the adjacent Class L area.

WILDERNESS STUDY AREA 305

Sheephole/Cadiz

GENERAL DESCRIPTION

This area (136,000 acres)[1] is bounded on the north by telephone line and gas pipeline rights of way at the Atcheson Topeka and Santa Fe Railroad line and maintenance road, to the east by a high-capacity power right of way and accompanying road, to the south by State Route 62, and to the west by a powerline road, a section of Amboy Road, a graded road through homesteads, and the old paved Iron Age Mine Road. Two distinct patterns of land ownership occur. The northern two-thirds of the area contains public and non-public holdings in an alternating north-south strip pattern; the southern third is largely public land, with non-public holdings in scattered sections. In addition, there are several recorded mining claims on the western and northwestern edges of the site. Landforms include 25 percent sand-covered fans, 20 percent mountains, 12 percent alluvial fans, 10 percent sand dunes, 5 percent sand-covered dissected fans, and 3 percent pediments.

WILDERNESS QUALITY

Description of Environment

The area contains two immense desert valleys, Cadiz and Sheephole, each bounded by steep but rounded granitic mountain masses. A small portion of Ward Valley, containing Danby Dry Lake, is also located within the roadless area. The Sheephole and Iron Mountains are main land masses in the area, while the Calumets and the Kilbeci Hills are smaller isolated mountains. Cadiz Valley is the larger of the two valleys, but also the most impacted by man. Both valleys contain dry lakes at their centers. A small dune system is located in Cadiz Valley north of the dry lake. Vegetation is relatively sparse in both valleys, although Sheephole Valley vegetation is lusher. Creosote, galleta grass, and mixed shrubs dominate the valley vegetation. Plants are almost nonexistent on the dry lakes and on the mountain slopes.

Natural Condition

Boundary adjustments have been made to take into account roads and to exclude from further wilderness consideration those portions where man's influence has destroyed the natural character and opportunities for solitude. The entire eastern half of the roadless area has been so excluded. Man's works in the excluded areas include numerous chemical operations on Cadiz Lake (with many trenches, dredge piles, and graded roads); salt works on Danby

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[1]Portions of T. 1 S., Rs. 12, 13, 14 and 15 E.; T. 1 N., Rs. 12, 13, 14 and 15 E.; T. 2 N.,Rs. 12, 13, and 14 E.; and T. 4 N., Rs. 13 and 14 E., SBM.

Lake; existing and abandoned mines (one in the northern Kilbeck Hills and one near the Iron Mountain Pumping Station, both with major surface scars and slag piles); the Iron Mountain Pumping Station; and numerous primitive ways around Cadiz and Danby Dry Lake, near the dunes, and at the southeast of the Calumet Mountains. A well-maintained dirt road penetrates to the heart of Cadiz Valley leading to the Cadiz Lake chemical operations. These man-made features within the WSA, most of them highly visible because of their location in the broad, flat valleys, greatly affect the natural character of the area. The Old Patton Road, the northern half of which is now unimproved, forms the eastern boundary of the area and is easily recognizable from the ground. The small boundary adjustment on the western edge of the roadless area is to exclude a telephone line road, the tunnels and debris of the abandoned Sheephole mine, and the private homestead north of Dale Lake. The remainder of the area, which mostly includes Sheephole Valley and adjacent mountains, is relatively pristine. Man's works, which include only a few primitive ways and one abandoned mine on the east slope of the Sheephole Mountains, are substantially unnoticeable there because of distance and screening by vegetation. This valley is one of the rew remaining relatively pristine valleys in the desert.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The valley and terrain variety in the mountains offer outstanding opportunities for solitude and for a primitive and unconfined type of recreation. Opportunities for solitude become outstanding with distance from the edges of the WSA. The valley provides seemingly endless, unobstructed vistas of natural desert scenery, while the surrounding mountains offer even more seclusion within the many canyons and coves. The relative absence of man-made features within the area enhances its unconfined character. The main feature of this area is the outstanding opportunity for recreation which takes advantage of the vastness and spaciousness provided in a broad, sweeping valley. Sheephole Valley successfully combines a sense of vastness to the north and south, with some sense of enclosure provided by the linear mountain ranges to the east and west.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 63 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Claims include all those that appear on

the December 12, 1979, BLM printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has possible potential for metals and uranium in the Sheephole and Calumet Mountains and sodium in Dale Lake. There are 14 unpatented claims recorded.

Vegetation

No unusual plant assemblages occur within WSA 305. Vegetation consists mostly of creosote bush scrub. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

About one-tenth of this WSA (Sheephole Mountains) is permanent range of the Sheephole Mountains bighorn sheep herd, numbering approximately 12 individuals. One spring in these mountains provides water. About 15 percent of the area has desert tortoise populations of between 20 to 50 tortoises per square mile. One eyrie and 70 square miles of foraging habitat for prairie falcons occur in WSA 305.

Cultural Resources

No known areas of cultural resource sensitivity/significance are located within this proposed WSA. However, the area has not been systematically surveyed. Surrounding areas do have high densities of cultural material, and numerous sites are predicted for this area.

Native American Uses, Needs, and Sites

The extreme northwest section of this WSA represents an area of Chemehuevi salt collection. Estimated potential resources other than salt collection may be Chemehuevi seasonal food, craft and material gathering sites in the southern reaches of the Calumet Mountains and vicinity. The southern and eastern slopes of the Sheephole Mountains may also provide resource material.

Scenic Quality

Scenically, the over-all rating was "medium." The area includes the western edge of Cadiz Valley, Sheephole Valley, Calumet Mountains, and the Sheephole Mountains. Both mountain ranges are generally granitic in nature and highly eroded and present a rugged appearance. Vegetation in the Cadiz Valley is sparse, while that in Sheephole Valley is more dense and varied. The most notable feature of the area is the lack of intrusions within the Sheephole Valley area. All ofther factors were judged as average.

Range Uses and Potential

There are no known range resources in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

A large number of comments indicated that the Wilderness Study Area should be expanded. Other comments referred to access routes into this area, which was shown as having wilderness values. No changes were made in the findings as a result of these comments.

Study Phase

Of the 99 letters, about 70 favored wilderness designation. Most of them addressed the excluded eastern half of the area and did not mention the area included in the inventory. Cadiz and Ward Valleys were described variously as breathtaking, extremely striking, vast, beautiful, and a Sahara-like scenery unique in the desert. It was suggested that the borders of the WSA exclude the salt-mining operations. Motorized vehicle scars on the valley floor were felt to be not severe enough yet to preclude swift rehabilitation. Unique endemic species of insects, a land snail, several plant communities, and two dry lake beds which provide short-term habitat for water birds (including snowy egret) after heavy rainfall were all felt to constitute a rare area in the desert which should be protected.

The included Sheephole Mountain area was praised for its reptile and bird life, clean air, scenic vistas, wildflower displays, and flowing water. It was recommended that protection of the ecosystem of the Joshua Tree National Monument be extended to relieve the visitor pressures on the monument.

It was also felt that motorized vehicles, attracted to the terrain, cause litter, dust, and noise pollution and that less sensitive areas are available for their use. The sand dunes area was seen to provide opportunities for scientific study of a previously unstudied and unstable dunes system. Some commenters felt that exclusion of this sand dunes area from wilderness consideration shows BLM bias against low-profile topography and broad valley floors in the wilderness inventory; it was also seen as a concession by BLM to motorized vehicle use rather than a proper interpretation of 2(c) criteria.

Multiple-use concerns often described the value of the area for vehicle-related recreation. Many discussed the qualities of the excluded eastern half, noting that the area lends itself to unlimited motorized vehicle use, and driving for pleasure, and dune-buggy riding--"a very good area for vehicles." General family-type recreation (wildlife study, photography, trailriding, camping, and rockhounding) are all available to the vehicle-oriented recreationist in this area. In addition, enjoyment of the educational and scientific values in the western half, including the feldspar phenocryst in Sheephole Pass, require access.

Characteristics of the area which detract from wilderness quality were seen as: the proximity of the area to the Twentynine Palms Marine Corps Base; lack of outstanding natural features; and the visibility of and noise from

wood-pole powerlines, Amboy Road, the railroad, and a telephone microwave radio tower on the western edge, all of which intrude into the area up to 2 miles.

Commenters listed other multiple-use concerns which need to be addressed: future installation of communications facilities; protection and maintenance of access to existing facilities with room for expansion; revision of the wilderness boundaries to follow natural landscape contours; and access to private land holdings. Energy interests noted the potential for oil, gas, and geothermal resources, which could not be developed if the area were designated wilderness.

The question of the legality of designating this area as wilderness was raised since the private land patterns create a public land area of less than 5,000 acres.

Numerous comments were received in response to the workbook. All of them favored wilderness designation and supported the need for recreation, education, preservation, as well as recommending that the eastern portion of the area be included as wilderness also.

Draft Plan Alternatives

A variety of public comments specific to WSA 305 was received in response to the Draft Desert Plan Alternatives. Several comments agreed with the Protection Alternative. Others agreed with the Use Alternative. Still others wanted more wilderness than was recommended in the Protection Alternative--additional areas included Cadiz Valley and Iron Mountains. A few comments disagreed with the Balanced Alternative and wanted to include the eastern half of this area as wilderness. A number of commenters suggested that wilderness decisions be related to resource values; they felt that insufficient reasons were given for dropping some areas from the Balanced Alternative.

General comments included a recommendation that exploration for and development of oil, gas, and geothermal resources are the best use for this WSA.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Sheephole/Cadiz Wilderness Study Area (305) is recommended as suitable for wilderness designation.

Although the relative wilderness ranking was close to the middle of all the study areas, the Sheephole Valley is considered relatively pristine compared to the majority of desert valleys. Uniqueness is a criterion identified in the desert-wide wilderness objectives; this was a primary consideration in the decision. This designation would also afford a degree of protection of the small bighorn sheep herd, desert tortoise population, and the known prairie falcon eyrie and foraging area.

IMPACT OF PROPOSED PLAN

Almost the entire WSA is recommended for Class C. A very small portion of the study area, consisting of the dry lake area at the southern end, is recommended for Class L.

Class C designation will impact positively the wilderness values in this area, which is one of the few, large, unintruded valleys in the California Desert. The small Class L area may result in adverse impacts to wilderness values. Vehicle use on designated routes in this flat, open area would impair opportunities for solitude and primitive recreation.

WILDERNESS STUDY AREA 307

Turtle Mountains

GENERAL DESCRIPTION

This extremely large area (238,200 acres)[1] is bounded on the west by a well-maintained telephone line road; on the east by U.S. Highway 95; on the south by State Route 62, the California River Aqueduct, and a railroad line; and on the north by a maintained mining access road and the county-maintained Turtle Mountain Road. Public lands comprise all but one section of the WSA. Under Public Land Order 5224, SE1/4, Section 28, T. 3 N., R. 21 E., has been withdrawn for the protection of the recreation and public values thereon. Executive Order of December 28, 1921 (Public Water Reserve 107), withdrew the NE1/4 of the NE1/4, Section 33, T. 4 N., R. 21 E., as a public water reserve. Several areas throughout the area have been possibly contaminated by unexploded military ordnance, a remnant of World War II maneuvers. At least 20 recorded mining claims have invaded the area in the north, center, and southeast. This WSA contains 30 percent alluvial fans, 28 percent dissected fans, 20 percent mountains, 20 percent hills, and 2 percent riverwashes.

WILDERNESS QUALITY

Description of Environment

The area comprises a diverse landscape, ranging from broad, open bajadas to highly eroded spires and cliffs. The northeast half of the mountain range is characterized by steep, highly eroded volcanic spires and peaks, while the southwest section has a steep but rounded form. Between the two mountain sections lies a large, flat interior valley that is transected by numerous shallow washes. Vegetation occurs throughout the area and is relatively lush on the bajadas which completely surround the mountains. The interior valley is dominated by fairly dense stands of creosote, cactus, and mixed shrubs. Vegetation on the mountain slopes is more sparsely distributed, except in the canyons and washes, where palo verde, acacia , and other wash-type plants add to the diversity. The Mopah Springs site is noted for its small cluster of native fan palms, the northernmost extension of this species.

Natural Condition

The bulk of the area generally retains its primeval character. Some boundaries have been adjusted to exclude areas where man's activities have

[1]Portions of T. 1 S., Rs. 19, 20, 21, 22, and 23 E.; T. 1 N., Rs. 19, 20, 21, 22, and 23 E.; T. 2 N., Rs. 19, 20, 21 and 22 E.; T. 2 N., Rs. 19, 20, 21, and 22 E.; T. 3 N., Rs. 18, 19, 20, 21 and 22 E.; T. 4 N., Rs. 18, 19, 20, and 21 E.; and T. 5 N., Rs. 19 and 20 E., SBM.

degraded the apparent naturalness. A primitive way has been chosen as the boundary on the southwest side, thereby excluding a network of unimproved ways located west of the new boundary. Another primitive way has been chosen as a southern boundary, thereby excluding the extensive system of flood-control dikes that border the Colorado River Aqueduct. Both of these primitive ways have been used in the past as routes for the Parker Score 400 motorcycle race. The northeast corner of the roadless area has been excluded because of the presence of an active mine and evidence of past intensive use on desert pavement by tanks and other military equipment during Operation Desert Strike. A mining area, cabins, metal sheds, tunnels, and tailings are scattered throughout the area. Similarly, a perlite mine on the east side of the mountains and a mining area at the north tip of the mountains have been excluded because of their impacts, which include road scars, slag piles, and old cabins. A short road also enters from the north leading to a trailer which lies to the west of Mohawk Springs.

The remainder of the area is relatively free from man's influence, leaving its natural character intact. Man's impacts, which include some primitive ways to abandoned mines and cabins (Horn Springs, Carson's Well, the entrance to Mopah Springs Canyon, and others), are substantially unnoticeable due to terrain variety and sheer distance. Overall, the area appears to have been affected primarily by natural forces.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The vastness and conformity of the area allow a relative freedom of unconfined movement. The diverse topography and relatively dense vegetation offer a degree of visual screening that allows the area to accommodate a large number of visitors without reducing opportunities for solitude. The steep volcanic and granitic cliffs and spires offer excellent opportunities for mountain and rock climbing. The presence of various springs in the area enhances its primitive recreational potential.

The Turtle Mountains have not yet been studied in detail for unique qualities, but they do have outstanding volcanic formations in the northeast portion. Mopah Springs holds the distinction of being the northernmost known native palm oasis. Bighorn sheep have been sighted throughout the area. Numerous historic mining areas are located throughout.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 15 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based

solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has possible potential for metals, perlite, and other industrial minerals, uranium and thorium, oil and gas. There are 22 unpatented claims recorded.

Vegetation

No unusual plant assemblages occur within WSA 307. Vegetation within the WSA consists mostly of creosote bush scrub, desert microphyll woodland, and fan palm oasis. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

Wildlife values are extensive. The region includes all of the Turtle Mountains bighorn sheep herd range and 90 square miles, or most, of its seasonal range. Desert tortoise habitat occupies 95 square miles, with tortoise densities of 20 to 50 animals per square mile. Prairie falcon and golden eagle foraging habitat (75 square miles) and two falcon and eagle eyrie are known. Sites are known for Bendire's thrasher (breeding location) and western pipistrelle. Three potential ACECs exist: Chemehuevi Wash, Fenner-Chemehuevi Wash, and Vidal Wash. There are also 11 important springs in the Turtle Mountains.

Cultural Resources

Several areas of known cultural resource sensitivity/significance are located within this proposed WSA.

Native American Uses, Needs, and Sites

The western part of this WSA is an area of Chemehuevi occupations. The Turtle Mountains have been associated with ritual use and extensive occupation. A Chemehuevi campsite lies in the middle of the Turtle Mountains in the northeast section of the WSA. The Chemehuevi bighorn sheep hunting area also lies in the northeast section of the WSA. A Chemehuevi trail enters the WSA in the northeast and runs adjacent to the entire northern border.

Scenic Quality

The area is composed of two classifications of scenic quality. The western and southern edges are "low" and the large interior area is "high." The northeast Turtle Mountains are volcanic in nature, and red basalt spires are the focal point. Other rocks display pinks, golds, greens, browns, and tans.

To the south, the landform is more rounded with occasional mountain peaks and steep canyons.

Vegetation is sparse, but a variety exists. Concentrations can be found in washes, near wells, and around springs.

Ward and Vidal Valleys, which account for a portion of the WSA, and the foothills present a different picture. Vast plains, dissected by shallow washes with concentrations of vegetation, dominate this area. Intrusions are more frequent and result in greater impacts.

The most notable scenic values are located in the northeast Turtle Mountains and maximum ratings were given to landform, color, uniqueness, and lack of intrusions. Vegetation also received a better-than-average rating.

General Recreation

Several interpretive resources dot this WSA. The Turtle Mountains themselves are the only interpretive site in the WSA ranked as "high." Two sites are rated as "medium" for their interpretive value: Mopah Peak and Mopah Springs. Mohawk Springs is rated "low" for its interpretive values. In addition, four interpretive sites are not evaluated as yet.

One teaching and research site receiving up to four visits annually from pre-college, college, and university classes is located within this WSA.

Good floral opportunities exist here particularly for deep purple phacelia, yellow caps, sunflowers, and desert star daisies.

Three rockhounding sites, ranging from excellent to fair in quality, are within this WSA. Some of the material found in these sites includes agate, chalcedony rose, jasper, moss brown agate, perlite, geodes, and rose quartz.

Other land management classifications in this WSA include ICMP "motorized vehicle closed area," Primitive Area, and Natural Environment Area. This WSA also contains a National Natural Landmark.

Four concentrated use zones exist in this WSA; all are within or overlap that area designated as "motorized vehicle closed." Over 14,000 concentrated recreational visitor use days were counted in these four areas in 1978. Camping, rockhounding, four-wheel drive and motorcycle touring, sightseeing, and exploring are the primary activities for these concentrated use zones.

Range Uses and Potential

The WSA includes portions of the Lazy Daisy Allotment and the proposed Chemehuevi Allotment.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments referred to the following: presence of roads inside the Wilderness Study Area; mineral potential; unique geology; outstanding primitive recreation potential; outstanding primitive recreation potential; and outstanding solitude. The roads were field-checked and found to be ways, in most cases. The narrative indicates those areas that were excluded.

Study Phase

Of the 80 letters received, about 50 supported wilderness study designation. Many urged the inclusion of the northeast portion of the WSA to protect the values of Chemehuevi Wash, which include the northern limit of ironwood stands, palo verde, smoke trees, and crucifixion thorns; habitat for unique species of wood-boring beetles, spadefoot toad, and other wildlife; and a major drainage system for several mountain ranges. Commenters felt these high values warrant rehabilitation of impacts of past mining and motorized vehicle use, much of the latter a result of the Parker 400 race. Several commenters recommended deleting the route from the WSA, rerouting it, or designating only a narrow corridor for the race so that wilderness qualities could be protected in the rest of the area. Other areas mentioned specifically for protection included Cotton Valley, Vidal Valley, Mopah Peak, Stepladder Mountains, Mopah Springs, and Homer Wash. Values of the entire area include volcanic formations, Nelson bighorn sheep, creosote shrubland, historic mines, and archaeological sites. The area is a good "biological signpost" that could be designated as an outstanding natural area or as part of a larger East Mojave National Park, according to some letters. Day hikes and backpacking opportunities are excellent in the area; it is wild and little visited. A combination of WSAs 309, 309A, 31, 294, and 310 was suggested to protect the wash systems of the area.

To some, wilderness values exist only in the interior of the Turtle Mountains, in the middle 30 percent of the roadless area, or away from the influence (up to 2 1/2 miles) of visibility and noise of traffic on the adjoining railroad and highways and visibility of the aqueduct. The remaining area has beauty but little wildlife or unique vegetation, according to some commenters. Other sight-and-sound intrusions into the area, listed in letters, were air traffic, powerlines, remains of structures, and lights from cities at night. Wilderness designation would damage land values both within and bordering the area, some felt.

Values more important than wilderness, as listed by commenters, included vehicle-related recreation such as four wheel drive and motorcycle riding, prospecting, rock climbing, trail riding, camping, and driving for pleasure. Rockhounds mentioned the loss of the interior of the Turtle Mountains under wilderness because of lack of vehicle access; they wanted access for the remainder of the area to collect turquoise, chrysocolla, banded moss agate, and other gemstones.

Some commenters pointed out that concentration of recreationists at Parker Dam, to 120,000 on a long weekend, had been relieved by dispersion into the desert areas surrounding the dam; this should continue, according to the

commenters, because the resort "cannot absorb all of the pressure." Carson Well and Clark Cabin Mesa were among the good recreation sites mentioned.

Much of the WSA has good mineral potential, according to some. Gold may exist in the northwest Turtle Mountains. Deposits at Horn mine indicate possible significant amounts of gold, silver, and copper in the area. A need for access for flood control and derailment work was expressed by the AT&SF Railroad.

Numerous comments were received in response to the workbook. Most favored of wilderness designation. Preservation with expansion was a common theme. Few commenters recommended maintaining existing uses.

Draft Plan Alternatives

A variety of public comments specific to WSA 307 was received in response to the Draft Desert Plan Alternatives. Several agreed with the Protection Alternative. One agreed with the Balanced Alternative. Several commenters wanted more wilderness and suggested adding more nonmountainous wilderness in the Chemehuevi-Turtle Mountains area. One comment disagreed with the Balanced Alternative.

General comments included the recommendation to add a buffer strip around the wilderness and the opinion that exploration for and development of oil, gas, and geothermal resources under the No Action Alternative would be the best use of the WSA.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The central portion of the Turtle Mountains Wilderness Study Area (307) is recommended as suitable for wilderness designation. This area includes most of the Turtle Mountains and accounts for approximately 30 percent of the WSA. The remaining area is divided roughly in half (east-west) and recommended for Class L and Class M.

The area rated high (15) in relative wilderness values but did not possess any qualities identified in the desert-wide objectives. It was decided that within that central portion recommended as suitable the value of the wilderness resource exceeded the value of the competing resources.

The eastern portion toward the Chemehuevi Valley is recommended for Class L. This class provides for limited access for mineral exploration and development and recreation. Mining claims would be excluded from the area recommended as suitable for wilderness.

The western portion is recommended for Class M to provide for increased access for mineral exploration and recreation. Motorized recreation within this WSA is a significant factor, and it was decided that within Ward Valley, the recreation values exceeded those of wilderness.

IMPACTS OF PROPOSED PLAN

Much of the mountainous portion is recommended for Class C, which would positively impact the wilderness values. The restrictive uses associated with the Class L portion would not significantly affect wilderness values, although vehicular use of designated routes would adversely impact opportunities for solitude. Uses associated with the Class M area, which consists primarily of bajada and valley lands, would have significant adverse impacts on wilderness values. Vehicular use of identified routes would impair opportunities for solitude, while mineral activities and utility development would affect naturalness. However, the highest quality wilderness values are located mostly within the Classes C and L areas, where they would receive some protection.

WILDERNESS STUDY AREA 310

Chemehuevi Mountains

GENERAL DESCRIPTION

The area (95,400 acres)[1] is bordered on the north by maintenance roads associated with a large interstate pipeline right of way. State Route 95 forms the western border. The southern border is a powerline right of way and Lake Havasu Road. The eastern border is a combination of the Chemehuevi Indian Reservation and the Havasu National Wildlife Refuge boundaries.

The area is 60 percent public lands, with non-public holdings in north-south strips of alternating sections. There are two areas within withdrawals of the Water and Power Resources Service: W1/2SW1/4, Section 31, T. 6 N., R. 23 E.; and approximately 10 sections in the southeastern corner of the area. There are several recorded mining claims in the western and in the southeastern areas.

This WSA contains 45 percent hills, 30 percent mountains, 10 percent pediments, 5 percent dissected fans, 5 percent highly dissected fans, and 5 percent alluvial fans.

WILDERNESS QUALITY

Description of Environment

From the boundary near the Colorado River, the Chemehuevi Mountains, which are the dominant physical feature, rise abruptly through a convoluted series of highly eroded and vegetated washes containing smoke trees and mesquite. The mountains consist of a high ridge with 18 peaks over 2,500 feet in elevation. The west side of the mountain ridge drops abruptly to the desert floor at 2,000 feet, which is the northeast slope of Chemehuevi Valley. The upper edge of the valley is rocky, irregular, and eroded and is densely vegetated with Bigelow and buckhorn cholla, barrel cactus, and several other small cactus varieties. Ocotillo is also numerous in the area. From the Chemehuevi Valley, the mountain ridge appears to be light gray in color and very abrupt.

Natural Condition

A small area in the extreme southeast corner along the Lake Havasu Road has been affected by man and is excluded from further wilderness study because of motorized vehicle scars. The remainder of this large area has been affected

[1]Portions of T. 4 N., Rs. 23 and 24 E.; T. 5 N., Rs. 22, 23, and 24 E.; T. 6 N., Rs. 22, 23, and 24 E.; and T. 7 N., Rs. 23 and 24 E., SBM.

primarily by natural forces, with man's imprint substantially unnoticeable. An unmaintained jeep trail, running from the west boundary through the mountains and Trampas Wash to the Colorado River splits the area. This way has a substantially unnoticeable effect upon the primeval character of the land, as the trail is located in the sandy washes. There are a few big-game guzzlers in the central portion. An unmaintained way on the west side of the small Sawtooth Range has little effect upon the naturalness of the area, as the surrounding vegetation screens it well.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The outstanding vegetation and convoluted landscape with hugh canyons, washes, and tall ridges and peaks provide maximum screening and isolation from other visitors. The area could absorb a large number of visitors and still provide outstanding opportunities for solitude. The area offers outstanding opportunities for a variety of challenging terrain for a diversity of primitive and unconfined types of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 18 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for metals, clay, and sand and gravel. There are no claims recorded within the WSA, but two large blocks totalling 597 claims lie adjacent to the western boundary.

Vegetation

No unusual plant assemblages occur within WSA 310. Vegetation consists mostly of creosote bush scrub and desert microphyll woodland. No rare plant species are known to occur within the WSA.

Wildlife

Densely vegetated with cholla and other cacti, the Chemehuevi Mountains provide habitat for a herd of about 25 desert bighorn sheep with 45 square miles, or 100 percent, of its permanent range and 35 square miles, or

100 percent, of its seasonal range. Mule deer occupy approximately 100 square miles of the WSA. Desert tortoises are found in moderate densities (50 to 100 per square mile) over about 5 square miles and in low densities over about 13 square miles.

Cultural Resources

Within this large WSA are several areas of known or predicted cultural resources sensitivity.

Native American Uses, Needs, and Sites

Nearly 75 percent of the eastern area has been employed traditionally by the Chemehuevi for collection purposes and is important for its ritual/mythological association. The Chemehuevi Trail extends into the western portion of this WSA. Two Mohave placename/locales are in the north-central portion of the WSA.

Scenic Quality

The mountain areas are very rugged and mostly inaccessible, except on foot. Composed of cliffs, deep washes, and steep rock faces, the site presents an imposing mass. Vegetation tends to be sparse throughout but with concentration in the washes. Intrusions are few and, for the most part, limited to the northern portions. The foothills are more heavily intruded than the mountains themselves, and powerlines, gaslines, and roads are common.

The heart of the area received the maximum score for landform values and a very high score for uniqueness.

General Recreation

Fair hunting exists in the WSA for deer. Rockhounding opportunities range from good to fair with chalcedony, jasper, agate, opalite, geodes, and blue opal.

Range Uses and Potential

The WSA lies within the Chemehuevi Herd Management Area.

SUMMARY OF PUBLIC COMMENT

Inventory Phase

Comments dealing with inventory indicated the existence of the jeep trail through Trampas Wash. Other comments were in agreement with findings.

Study Phase

A dozen comments on WSA 310 were divided about equally between support of wilderness designation and support for a multiple-use designation. Features of the area noted in support of a WSA include special wildlife values, such as Great Plains toad, spadefoot toad, tree lizard, western ground snake, Sonoran lyre snake, bighorn sheep, and mountain lions; scenic rock groupings, palo verde and cacti; and numerous archaeological artifacts. A recommendation was made to combine Chemeheuvi Valley, Turtle Mountains, and Whipple Mountains into a contiguous wilderness area.

Multiple-use concerns included the following: geothermal potential exists in the area; the Water and Power Resources Service may need the face of the mountains for the Colorado River Project riprap sites; AT&SF Railroad personnel need access for flood control, drainage surveys, and derailment work.

Only the middle 50 percent of the WSA has outstanding wilderness values, according to one comment. Bordering intrusions include a gas pipeline, State Route 95, Lake Havasu Road, Los Angeles Metropolitan Water District 230 kv transmission line -- all with zones of influence of 1 or 2 miles into the area. Concern about the effect of wilderness designation on private land holdings was expressed.

Several comments were received in response to the workbook. Several recommended a boundary change to enhance wilderness quality, to maximize wilderness, and to restrict motorized vehicle use. It was also stated that access is inadequate.

Draft Plan Alternatives

Several public comments specific to WSA 310 were received in response to the Draft Desert Plan Alternatives. Several comments agreed with the Protection Alternative. Other comments wanted more wilderness added by combining inventory units 309 and 309A. General comments include the opinion that exploration for and development of oil, gas, and geothermal resources under No Action Alternative would be the best use of the WSA.

SUMMARY OF RATIONALE FOR THE PROPOSED ACTION

Wilderness Study Area 310, Chemehuevi Mountains, is recommended as suitable for wilderness designation.

This study area ranked very high relative to the other areas. Its over-all quality was a prime consideration in the determination that the area was suitable for wilderness. Competing resource values were considered to be low, with hunting and rockhounding being the primary recreation activities.

This designation would enhance the natural resource, which include bighorn sheep, mule deer, and desert tortoise population.

IMPACT OF PROPOSED PLAN

Class C would result in positive impacts to this area's outstanding wilderness values.

WILDERNESS STUDY AREA 312

Whipple Mountains

GENERAL DESCRIPTION

This trianglar area (85,100 acres)[1] contains the Whipple Mountains. It is bordered on the north by a powerline road, on the south by the Colorado River Aqueduct and the Copper Basin Reservoir roads (Bowman's Wash Road), and on the west by a maintained mining access road, which runs just west of Chamber's Well. About five or six randomly spaced sections in the area are non-public lands. Four tiers of sections along the western edge of the area have possibly been contaminated by unexplored ordnance, a remnant of World War II maneuvers. Several sections along the south, west, and east edges of the area have been invaded by the location of a number of mining claims. This WSA contains 40 percent hills, 30 percent mountains, 15 percent highly dissected fans, 10 percent plateaus, 3 percent dissected fans, and 2 percent riverwashes. Most soils in this WSA are highly sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

The topography of the area is basically that of steep desert mountains of brick-red rock, naturally cut by deep, steep canyons. Many spires, pinnacles, and eroded rock forms are visible throughout the area. Most of the mountains tend to be steep; the canyons and washes tend to be wide and sandy. Vegetation is highly variable, with creosote bush scrub and brittle bush. Many species of cactus are present throughout the area, including foxtail cactus, Bigelow cholla, and Mojave prickly-pear. On the extreme eastern point, a few natural stands of saguaro cactus are found. Although not extensive, this is one of only two or three such stands in California. Desert riparian communities are well represented with locally dense growth of mesquite, palo verde, and ironwood.

Natural Condition

A few roads and ways penetrate the area from the Colorado River Aqueduct leading to both active and abandoned mines, including a patented mine at Sections 29-30 (T. 3 N., R. 25 E.). As a result of these permanent structures, the boundary of the roadless area in the south has been drawn to exclude these activities of man from further wilderness study. Primitive ways are also prevent in the northwest corner of the area. Due to their

[1]Portions of T. 1 N., R. 24, 25, and 26 E.; T. 2 N., R. 23, 24, 25, and 26 E.; T. 3 N., R. 23, 24, 25, and 26 E.; and T. 4 N., R. 24 E., SBM.

primitive nature and topographic screening by the hills around them, impact is minimal and does not affect the naturalness of the land. The majority of the land is in an undeveloped state, with no permanent structures. Because of the roughness of the terrain, the area is undisturbed by man and is affected primarily by natural forces. This area retains its primeval character and influence. The Wilderness Study Area boundary coincides with the roadless area boundary with the exception of the excluded mining area in the south.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Outstanding opportunities for solitude exist throughout the area. The ability of the land to topographically screen visitors from one another by steep canyon walls and eroded peaks and hills is exceptional. Outstanding opportunities for primitive and unconfined types of recreation are present. The aspects of terrain and the large size of the area ensure that the visitor will experience freedom of movement unhindered by physical boundaries.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 8 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Within WSA 312 there has been production of gold, copper, and manganese, and there are substantial demonstrated copper reserves.

In the eastern part of the WSA the American Eagle mine (under active unpatented claim) has produced 122,194 pounds of copper. About 18,830 pounds of manganese was produced from the Stewart mine during World War II. This mine is located in Section 6, T. 3 N., R. 25 E. The U.S. imports 98 percent of its manganese consumption. Placer gold was recovered from Whipple Wash during the early part of the century. Just barely eliminated from the WSA, the Monument King and Moulton mines, located 4 miles west of the Copper Basin Reservoir, produced as much as 144,936 pounds of manganese in operations during the two world wars. The Copper Basin mine, 2 miles west of the Copper Basin Reservoir, produced some copper prior to World War II and has demonstrated reserves of 14.4 million pounds of copper. This property lies just outside of the WSA.

There are numerous copper shows which have been prospected and mined inside the WSA; however, these mines were not field-checked and information is scanty. Within the WSA several geochemical samples were higher than the mean in silver, lead, zinc, molybdenum, and tin. Two samples have detectable uranium or thorium. Silver and lead have reportedly been produced from within the WSA boundaries. Airborne geophysical surveys indicate the area has potential for uranium and thorium.

Within this WSA there is potential for copper, gold, silver, lead, manganese, uranium, and thorium. The volcanoclastic Gene Canyon and Copper Basin formations have the highest potential for uranium and thorium. These formations also have the highest potential for manganese.

Vegetation

The only significant stand of giant cactus or saguaro occurs on the steep rocky slopes of the Whipple Mountains facing the Colorado River. Several hundred saguaros are found here. In one 6-square-mile area northwest of Parker Dam, 104 were counted, and they undoubtedly occur within the CDCA. Together with them is foothill palo verde, making a vegetation type which is distinctly Sonoran Desert in aspect and unique to California. Most of the vegetation of the area is, in addition to this, made up of creosote bush scrub and desert microphyll woodland. No rare, threatened, or endangered plant species are known to occur within WSA 312, although the possibilities of finding coryphantha vivipara var. alversonii is good.

Wildlife

This area includes approximately 50 percent (90 square miles) of the former range of the Whipple Mountains bighorn sheep herd. About 3 percent of the area has desert tortoise densities of 50 to 100 per square mile. A small amount of prairie falcon foraging area (8 square miles) is present. Five springs are located in the eastern portion of the area.

Cultural Resources

Several areas of cultural resource sensitivity/ significance are located within this proposed WSA.

Native American Interests

The entire eastern half of this WSA is marked by extreme sensitivity to the Parker Chemehuevi, Mohave, and Halchidhoma. Numerous areas of mythological association plus burial, ritual collection, and occupation sites are found in this WSA. A Chemehuevi trail, recently identified, passes through the western portion of the WSA, as does a Mohave trail. A Chemehuevi trading camp is located on the extreme southern end of the area. A Mohave mythological stop is located in the center of the WSA and the place of Halchidhoma giant origins is located in the east-central extension of the WSA.

Scenic Quality

Overall, the major portion of the area was rated "high" with small portions in the north and south rated "medium." The Whipple Mountains contain some of the desert's more interesting landforms and color displays. Eroded spires, natural bridges of red-brown lava, horizontal stripes of brick-red sedimentary rock, capped with layers of gray-green sediment can be found throughout. Many varieties of vegetation and cacti exist in the Whipple

Mountains. Even Saguaro cactus have been sighted in the eastern portion near the Colorado River. The landform, color, and uniqueness were scored extremely high and vegetation was rated above average within the area. Monument Peak is a prominent regional landmark which can be seen from many miles around. A portion of the area was previously designated "primitive."

General Recreation

Prominent spires, canyons, natural bridges, and numerous faults make the Whipple Mountains a very scenic area as well an interpretive site rated "high" for its interpretive values. Monument Peak is another "spectacular feature" in the Whipple Mountains and is rated "medium" for its interpretive qualities. Three other areas located within this WSA have yet to be evaluated.

One teaching and research area resides within this WSA. It attracts as many as four visits annually from pre-college, college, or university classes.

Deer hunting is fair in this WSA. The ICMP has designated the entire area as a motorized vehicle closed area.

One low-intensity concentrated recreational use zone encompasses the central portion of this WSA and receives about 138 visitor use days (VUDs) per square mile per year. In 1978 this area accounted for 2,450 VUDs of recreational use. Primary recreational participation involved camping, sightseeing, exploring hunting, and target shooting.

Range Uses and Potential

A portion of the proposed Chemeheuvi Allotment is in the WSA. The WSA falls within the Chemeheuvi Herd Management Area.

SUMMARY OF PUBLIC COMMENT

Inventory Phase

Several public comments were received which agreed with the findings but stated that the southern boundary should be the Colorado River Aqueduct. No changes were made because of extensive mining activity between the southern boundary of the potential wilderness study area and the northern boundary of the Aqueduct. Other public comments addressed study phase considerations.

Study Phase

Twenty of the 33 comments on WSA 312 supported further study of the area as wilderness. Several felt this was a high priority candidate for wilderness, among the top 5 or 10 in the desert. Features cited include the variety of landforms, geologic study opportunities, the blending of Colorado and Mojave desert terrains, and flora and fauna, including one of the few saguaro cactus stands in California.

These scenic features attract vehicle-oriented recreationists who believed vehicle access into this rugged area was necessary to enjoy it. Multiple-use was also urged by mining interests, who noted that 30 percent of the desert was already withdrawn from mineral entry. Shallow Tertiary volcanic formations extending to the west from Copper Basin Reservoir indicate that the significant copper deposits discovered there may also exist within the boundaries of the roadless area. Gold, silver, and maganese deposits also potentially exist. The U.S. Water and Power Resources Service may need quarry sites within the area and is considering a pump-back storage site for the area, the "Whipple Wash Reservoir Site." Intrusions on wilderness qualities include: noise of aircraft, boats, vehicles on roads, visibility of lights from Chemehuevi Indian Reservation, cities of Earp, Parker, and Lake Havasu City. The Colorado River Aqueduct and bordering roads were felt to nullify opportunities for solitude for up to 2-1/2 miles into the area. One letter disputed the existence of saguaro cactus within the area. Another described the area as a "worthless, remote, ugly, hot and dry piece of rock."

One comment, received in response to the workbook, recommended maintaining existing uses pending final designation of the area as wilderness.

Draft Plan Alternatives

A variety of public comments specific to WSA 312 was received in response to the Draft Desert Plan Alternatives. Several agreed with the Protection Alternative. One commenter wanted more wilderness, Chemehuevi Valley in particular. One comment disagreed with the Balanced Alternative - no wilderness should be designated. General comments and suggestions included: mention of the substantially noticeable impacts of man within the WSA; designation of the area as a geologic ACEC, rather than as wilderness; and creation of a buffer zone around wilderness.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

A major portion of the Whipple Mountains Wilderness Study Area (312) is recommended as suitable for wilderness designation.

This area ranked 8 out of all the areas studied. The WSA is historically a mineral producer and conflicts between wilderness designation and mineral exploration and development were recognized. It was decided that, within that portion of the WSA recommended as suitable, the value of the wilderness resource exceeded the value of the mineral resource.

Approximately 10 percent in the eastern end of the WSA is recommended for Class L. This classification would allow access for mineral exploration and development and still protect the identified cultural and Native American resources which are abundant in the eastern half of the site.

A small portion in the southeastern corner, about 5 percent of the WSA, is recommended for Class M to provide for mineral development activities.

IMPACT OF PROPOSED PLAN

The wilderness values, which rated outstanding, would be positively impacted by wilderness designation. The fairly restrictive uses allowed in the narrow Class L portion of the study area, in combination with the terrain variability which tends to localize impacts, would result in no significant impacts to wilderness values in that area. The Class M portion is fairly small in size. Although uses associated with this class would adversely impact wilderness values locally, the wilderness values in the study area as a whole would not be significantly impacted.

WILDERNESS STUDY AREA 321

Big Maria Mountains

GENERAL DESCRIPTION

The area (53,200 acres)[1] is bounded on the northeast by State Route 95, and to the east by the California Desert Conservation Area border, to the south by an agriculture-related road, and to the west by Midland Road and a wood-pole powerline corridor. The area is approximately 95 percent public land, with non-public land sections scattered throughout. A material site for the Department of Highways (now CALTRANS) was established in N1/2SE1/4, NW1/4SE1/4, S1/2SW1/4 of Section 27 and NW1/4NW1/4 of Section 34 (part of which lies within the present study area) T. 5 S., R. 23 E., SBM. There are several mining claims, principally in the northern portion, with some scattered in the southern section. A Water and Power Resources Service withdrawal embraces a portion of the southern tip of the area. This WSA contains 60 percent mountains, 25 percent hills, 5 percent sand dunes, 5 percent dissected fans, and 5 percent highly dissected fans.

WILDERNESS QUALITY

Description of Environment

Two distinct mountain ranges form the core of the area. The Big Maria Mountains occupy the southern end; a smaller range, the Riverside Mountains, occupies the northern end. Both ranges are rugged, wild, and largely inaccessible except by foot travel. A variety of colors are displayed on the rocky, near-vertical slopes, especially in the Big Maria Mountains. Vegetation is mostly confined to the washes and canyons and consists chiefly of palo verde, ironwood, and acacia trees as well as mixed shrubs. Large bajadas, bisected by numerous washes, surround the two mountain ranges. Much of the bajada surfaces are covered with desert pavement. The ironwood tree dominates the scenery here, although palo verde, acacia, creosote, and mixed shrubs coexist.

Natural Condition

Boundary adjustments have been made for the California Desert Conservation Area boundary and to exclude those areas where the actions of man have degraded the natural character of the land. As a result of the exclusions, the area has been divided into two distinct units that meet the Wilderness Act criteria. Most noticeable of the man-made developments in the areas are

[1]Portions of T. 1 S., R. 22 and 23 E.; T. 2 S., Rs. 22 and 23 E.,; T. 3 S., Rs. 22 and 23 E.; T.4 S., Rs. 22 and 23 E.; and T. 5 S., Rs. 22 and 23 E., SBM.

the active quarry operations on the southwest slope of the Big Maria Mountains. These operations, which remove desert varnished stone for use as decorative stone, leave highly visible surface scrapings on the slopes. They are reached by graded access roads from Midland Road. Other exclusions include some gravel pits on the south and east sides of the Big Maria Mountains, active and abandoned mining operations with associated networks of roads and ways in the northwest Big Maria Mountains and in the area just west of the Blythe Intaglios, a series of unimproved ways leading to abandoned mining operations in the Slaughter Tree Wash area, an area heavily scarred by vehicle use on desert pavement between the two mountain ranges; and roads, ways, quarries, and patented mines around the perimeter of the Riverside Mountains.

The areas that have not been excluded generally retain their primeval character. Man's works are substantially unnoticeable because of terrain variation and vegetative screening. Much of the interior areas of both mountain ranges is essentially pristine. The adjusted boundary of the Big Maria Mountains generally follows the base of the mountains, taking to the ridgelines wherever mining on slopes occurs. At the south end it follows a primitive way southward to the edge of Palo Verde Mesa, then eastward along the edge, and north along a road to a quarry operation and past until it again meets the base of the mountains. On the north, the boundary leaves the base of the mountains along the 1000-foot contour, proceeding west to the wood-pole powerline road. The adjusted boundary of the Riverside Mountains generally follows the base of the mountains to the west, while to the north it follows ridgelines around patented and abandoned mines and quarries. In the northwest it follows the Old Blythe-Vidal Road.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The rugged interior areas of the Big Maria and the Riverside Mountains offer outstanding opportunities for solitude. These areas are essentially pristine and relatively inaccessible. In addition, the complex terrain serves as an effective screen for outside influences, even quarrying operations in the Big Maria Mountains immediately adjacent to the interior area. The mountains are highly dissected, creating a complex landscape that multiplies the opportunities for a personal sense of seclusion. While being more limited in opportunities for solitude, the outlying bajada areas provide a sense of vastness and effectively combine with the mountain ranges to create an expansive area in which the works of man go largely unnoticed. Opportunities for a primitive and unconfined type of recreation are also outstanding. In the mountains, the complex terrain is capable of accommodating a fairly large number of visitors. Recreation opportunities in the outlying regions are more limited. However, such areas are readily accessible, and the somewhat varied terrain may be ideal for certain primitive recreation experiences.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 78 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

In the northern part of this WSA there are at least three past producers of gold, silver, and copper, plus several manganese deposits. The entire eastern part of the Riverside Mountains has high potential for these metals. Silver, manganese, and copper are strategic minerals. The U.S. must import gold, manganese, and silver due to insufficient production from U.S. mines. The eastern part of the WSA has known resources of gypsum, with an estimated in-place value exceeding $600 million. The remainder of the WSA has speculative potential for metallic deposits, uranium, and thorium. There are nine mining claims in this part of the WSA recorded with BLM as of December 31, 1979.

In the southern part, known occurrences and geochemical and geophysical data indicate medium to speculative potential for uranium, thorium, manganese, gold, lead, zinc, iron, silver, and molybdenum. Thorium, lead, zinc, silver, and molybdenun are strategic minerals. Known occurrences and favorable geologic environment also indicate medium to speculative potential for limestone, silica, and gypsum. There are at least 10 mining claims in this part of the WSA recorded as of December 31, 1979. This WSA may be within the overthrust belt and has speculative potential for oil and gas.

Vegetation

No unusual plant assemblages occur within WSA 321. Vegetation within the WSA consists mostly of creosote bush scrub and desert microphyll woodland. Coryphantha vivipara var. alversonii occurs within this WSA, and Opuntia wigginsii probably occurs also.

Wildlife

Burros and deer inhabit a 7 square-mile concentration area. Bighorn sheep formerly inhabited the Riverside Mountains (16 square miles or 70 percent of their former range). The region includes 16 square miles or 30 percent of an area used as transient range by bighorn sheep. There are two prairie falcon nests and 25 square miles of foraging habitat. The Mojave fringe-toed lizard inhabits 7 square miles. There are three known Yuma myotis roosts and one western pipistrelle roost. The Brazilian free-tailed bat has been sighted. Two important springs exist in the Big Maria Mountains.

Cultural Resources

Approximately 8 square miles of known high sensitivity are located in the south and central portions of the WSA. Site types recorded include rock art, trails, rockshelters, rock alignments, and historic remains. The entire northern portion or 11 square miles of this WSA (in the Riverside Mountains) is a continuation of the high cultural sensitivity area described above.

Native American Uses, Needs, and Sites

The area contains no known significant Native American resources. The Serrano Mojave boundary passes through the center of this area in a northeast to southwest direction, which indicates both groups utilized this territory. However, the area is known in Mojave myth as a land of concentrated Chemehuevi occupation from historic times to present. Resources are anticipated in the foothills of the Big Maria and Riverside Mountains.

Range Uses and Potential

No livestock grazing occurs in this WSA.

Scenic Quality

This area, located in the Big Maria Mountains, has been divided into two distinct areas. Intrusions resulted in the removal of a large central portion of the mountains from wilderness consideration.

The northern portion, the Riverside Mountains, presents a rugged, jagged face on the eastern side and a more rounded, smoother appearance on the western side. Vegetation varies with elevation, being more abundant at lower elevations and in the washes.

Portions of the mountains reflect unique color displays which were considered to be annual. The southern part of WSA 321 is located within the Big Maria Mountains. Rugged surfaces and a wide variety of vegetation support the "high" scenic quality rating. Ironwood and palo verde can be found in the washes. This area received the highest score possible for landform and a very high score for color. Uniqueness of the area was considered above average.

General Recreation

Thrust faults and tilting geology, ranging from slight to steep incline slopes, resulted in the "medium" rating for the interpretive qualities of the Big Maria Mountains.

One teaching and research site, located in the north section, attracts one college class annually on the average.

One small concentrated recreational use zone was attributed 163 visitor use days in 1978. This site is less than one-half square mile in size and attracts primarily sightseeing, camping, picnicking, rockhounding, and four wheel drive touring and access recreational pursuits.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

The majority of the public comments supported the findings. Other comments dealt with mineral potential, which is a study phase consideration.

Study Phase

The 21 letters received discussing WSA 321 were divided about equally between support for and opposition to wilderness designation. A few letters favored access to the area for vehicle-related recreation. Other multiple-use concerns included: proposed Big Maria Microwave relay locator to interconnect Southern California Edison and Arizona Power Service microwave systems for circuits for the proposed Palo Verde Power Plant; geothermal drainage surveys, dike maintenance, and flash-flood surveys; and potential for mineralization (site or mineral not specified). The U.S. Water and Power Resources Service noted the possible need for riprap sites on the east face of mountains on the Colorado River.

Features of the area warranting wilderness study designation include the scenic, remote, and colorful qualities of the Big Maria Mountains; a "surprising" opportunity for wilderness protection so close to the Blythe area and access from I-10; the river orientation of the area, one of the few proposed in the California Desert; scenic cliffs and river vistas; archaeological sites, especially intaglios in Sections 22, 23, 26, 27, 34 and 35, T. 4 S., R. 23 E., which should be included in wilderness protection. A few comments discussed extending the southwest boundary of the roadless area to further protect the area, if rehabilitation of activities like the former quarrying operation are considered feasible.

One comment was received in response to the workbook. It recommended border changes to exclude surface marks which degrade wilderness quality.

Draft Plan Alternatives

Several public comments specific to WSA 321 were received. One comment agreed with the Balanced Alternative. Another disagreed with it. General comment included suggestions that exploration for and development of oil, gas, and geothermal resource under the No Action Alternative would be the best use of the WSA.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Big Maria Mountains Wilderness Study Area (north and south) is recommended as nonsuitable for wilderness designation.

This WSA is historically a producer of many minerals. Known gypsum deposits in the Riverside Mountains have a very high in-place estimated value. The area may be in the overthrust belt with speculative potential for oil and gas.

The area was ranked in the bottom half (78) of all WSAs and did not possess any of the criteria identified in the desert-wide wilderness objectives.

It was determined that the area's geologic, energy, and minerals value was more significant than its wilderness value. The area was recommended for Class L and Class M designation. The Class L designation is designed to protect the 19 square miles of high cultural sensitivity and wildlife identified within the area. The remaining part, designated Class M, would allow access for mineral exploration and development of mining activites. These classifications would also provide varying degrees of access for recreation. The northern portion of this wilderness area adjoins Arizona Wilderness Inventory Unit 5-18 at the CDCA border, and the southern part of WSA 321 joins Arizona Wilderness Inventory Unit 5-19, also at the CDCA border. Both of these inventory units are extremely small in relation to WSA 321.

IMPACT OF PROPOSED PLAN

Due to past mineral development, the boundaries of this WSA include only the most rugged portions of the mountains. Activities permitted in areas designated as Class L, would result in a minimum loss of wilderness values. Local impacts due to structures and support facilities could be expected. The western face of the range has been recommended for Class M designation. Activities allowed under these guidelines would significantly impair wilderness values. Large-scale development, even in the more rugged areas, could be visible over large distances. Past operations surrounding the area have resulted in severe impacts which impaired the natural condition of the area. Continuation of this level would significantly reduce or eliminate the remaining values.

WILDERNESS STUDY AREA 322

Rice Valley

GENERAL DESCRIPTION

The triangular area (54,300 acres)[1] is bounded on the north by State Road 62 and a railroad, on the southeast by a wood-pole powerline right of way and maintenance road, and on the west by Midland Road and the Santa Fe Railroad. The area contains a few widely scattered non-public land sections, which account for approximately 10 percent of the entire area. There is a large area in the northeastern portion of the area which has possibly been contaminated by unexploded military ordnance, a remnant of World War II maneuvers. This WSA contains 40 percent alluvial fans, 40 percent sand dunes, 8 percent sand-covered pediments, 8 percent dissected fans, 2 percent hills, and 2 percent mountains.

WILDERNESS QUALITY

Description of Environment

This area includes most of the broad, flat plain of Rice Valley, as well as the adjacent low and rolling West Riverside Mountains and the northwestern tip of the steep, rugged Big Maria Mountains. The Rice Valley dunes, a system of fairly small dunes approximately 30 feet high, form a long, narrow band through the middle of the valley. Vegetation is sparse throughout, consisting mostly of creosote, galleta grass, and mixed shrubs, with some ironwood and palo verde in several of the shallow washes.

Natural Condition

A large, central portion of the area is relatively untouched by man and has generally retained its natural character. In other portions, however, concentrations of man-made developments have degraded the natural character. Such developments include: the network of improved roads to active mines (surface scraping and tunnels) on the south slope of the northwest Big Maria Mountains; private land, tank tracks, and the series of deteriorating paved pathways in the area around Rice and the old Rice Airport; the network of unimproved ways west of the West Riverside Mountains; and the mining in the West Riverside Mountains. An area north of the sand dunes is posted by the Army with signs warning of unexploded underground ordnance. The adjusted boundary follows the ridgeline of the northwest Big Maria Mountains on the south, the wood-pole powerline on the southeast, and the primitive way cutting diagonally across Sections 5 and 9 (T. 2 S., R. 22 E.) and Section 31

[1]Portions of T. 1 S., Rs. 21 and 22 E.; T. 2 S., Rs. 21 and 22 E.; and T. 3 S., Rs. 21 and 22 E., SBM.

(T. 1 S., R. 22 E.) on the east. The northern boundary follows the southern edges of Sections 25 through 27, then drops to the northern edge of the sandy area, while the western boundary skirts around the non-public land in the northwest corner and then follows the railroad.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The central portion of the area provides outstanding opportunities for both solitude and a primitive and unconfined type of recreation. Vast, open spaces and the long stretch of undulating sand dunes enhance feelings of remoteness and offer freedom of unconfined movement, as well as a variety of primitive recreation activities.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 90 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

This WSA includes parts of Rice Valley and the northern Big Maria Mountains.

The southwestern portion of the WSA contains part of the geologic environment of the Bald Eagle lead-zinc-copper-silver mine. In the early 1950s, the mine produced 1,576 ounces of silver, 108 pounds of copper, 68,407 pounds of lead, and 1,901 pounds of zinc. The portions of the favorable geologic environment within the WSA have medium to high potential for these strategic minerals.

The southwestern portion of the WSA contains limestone occurrences and may also contain gypsum. This area has a medium potential for limestone and gypsum, but it is unlikely to be developed in the near future because better deposits exist in more favorable areas.

Three gamma-ray uranium anomalies occur in the southern part of the WSA: at the southern margin of the dunes; about 2 miles east of the Bald Eagle mine; and in the southeastern part of the WSA. These areas have medium potential for uranium. The alluvial area in the southwestern part of the WSA is a potentially favorable rock type and has speculative potential for uranium.

The entire WSA north of the mountains is classified by the USGS as a Potential Geologic Structure (PGS) for oil and gas.

The central part of the WSA contains potentially favorable lithology for salable deposits and has speculative potential for sand. It is unlikely that this area will ever be a major source of these materials, however.

Vegetation

No unusual plant assemblages occur within WSA 322. Vegetation consists mostly of creosote bush scrub, desert microphyll woodland, and psammophyte (sand dune) vegetation. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

A small section (7 square miles) of the Big Maria Mountains is transient bighorn sheep range. This comprises 5 percent of the total transient range of this local herd.

Cultural Resources

No areas of cultural resource sensitivity/significance are known in this WSA. The region, however, has not been systematically surveyed, and many sites can be expected in this area.

Native American Uses, Needs, and Sites

The extreme southern extension of this WSA represents an area identified in Mohave myth as concentrated Chemehuevi occupation from 1826 to present times. Rock art, occupation sites, ritual collection areas, and springs are considered sensitive by modern-day Mohave and Chemehuevi. This area represents a territorial subdivision between the Chemehuevi and Serrano groups.

Scenic Quality

Visual quality within the area has been rated as "medium." The valley is a broad, flat plain, somewhat higher than the adjacent valleys, and its location provides an uninterrupted view of the surrounding mountains. The surface is alluvium with large areas of sand and patches of small dunes. Vegetation consists of a sparse cover of creosote and mixed shrubs and annual wildflowers. Ironwood can be found in the washes.

General Recreation

The Rice Dunes are considered a major dune system for which public concern has been identified. One small concentrated recreational use zone of less than one-half square mile in size is located in the WSA. Only 102 recreational visitor use days were recorded in the zone in 1978. The primary recreational activities included sightseeing, camping, picnicking, and rockhounding.

Range Uses and Potential

The WSA contains a portion of the proposed Rice Valley Allotment. This portion of the proposed allotment in the WSA cannot be authorized for livestock use until Congress declares it non-wilderness.

SUMMARY OF PUBLIC COMMENT

Inventory Phase

An overwhelming number of comments favored the inclusion of this previously excluded area for further wilderness study, based on the naturalness and isolated nature of the central portion.

Study Phase

A heavy majority of the almost 40 comments on this area favored wilderness study designation. Several felt the broad, flat terrain of Rice Valley was an underrepresented landform in the wilderness inventory and favored protection of it and the plant and animal community dependent on the sandy terrain in the Rice Valley Dunes. The area provides good examples of desert pavement, complex mountain outcroppings in the Big Maria Mountains, and the potential for several-day backpack trips, day hikes, photography, and other recreational activities. The small but complex area of the West Riverside Mountains should also be included, some felt, to protect stands of ironwood, palo verde, and creosote shrubland. Also, the inclusion of the northwest section, excluding the town of Rice and mining intrusions, would complete the integrity of the mountain-valley system, increase solitude opportunities (creosote bush provides screening), and decrease motorized vehicle damage.

Intrusion upon wilderness qualities, which requires deletion of the WSA or adjustment of boundaries, includes the Federal Aviation Administration (FAA) transmitter and power transformer, and sights and sounds of the adjoining railroad, highway, and aqueduct, with influences of up to 2 miles into the area. Opportunities for solitude were felt by some to be poor in this flat area, which has higher value, some feel, as a motorized vehicle play area and family rock collecting area, particularly for Blythe recreationists, than as wilderness.

One comment was received in response to the workbook. It was in favor of wilderness/ preservation and recommended restricting use of four-wheel drive vehicles and dirt bikes.

Draft Plan Alternatives

Several Public Comments specific to WSA 322 were received in response to the Draft Desert Plan Alternatives. One comment agreed with the Balanced Alternative. One disagreed with it.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Rice Valley Wilderness Study Area (322) is recommended as nonsuitable for wilderness designation.

The study area has a recent history of mining and displays medium potential for mineral development. A portion is classified by USGS as a Potential Geologic Structure for oil ang gas. The site supports recreational

activities such as motorized sightseeing, camping, picnicking, and rockhounding. The WSA also contains a portion of the proposed Rice Valley allotment.

The WSA is ranked low (90) in relative wilderness values and does not possess any of the criteria identified in the desert-wide wilderness criteria. It was decided that the value of the mineral resource was greater than the value of the wilderness resource.

The entire area is recommended for Class M designation to provide access for continued mineral exploration and development and for more intense recreation.

IMPACT OF PROPOSED PLAN

The Class M designation provides for mineral exploration and development and for recreational access on identified vehicle routes in the study area. Such use would adversely impact the wilderness values of naturalness and opportunities for solitude. Vehicular use of the dunes would impact opportunities for solitude in that area, but due to the dune characteristics, would not substantially impact their natural character.

WILDERNESS STUDY AREA 325

Palen/McCoy

GENERAL DESCRIPTION

This immense area (266,531 acres)[1] is bordered on the west by State Route 177; on the north by State Route 62 and the Colorado River Aqueduct; on the east by the grand Rice-Midland Road, the AT&SF Railroad, and a gas pipeline right of way; and on the south by Interstate 10 and a powerline and gas line right of way corridor. The area is over 90 percent public land. Non-public lands are scattered except for one fairly large block near Palen Dry Lake. Portions of Sections 8 and 14 (T. 1 S., R. 20 E., S. B. M.) have been withdrawn under Executive Order of January 24, 1914, as Public Water Reserve 14. Also, a protective withdrawal has been placed on E1/2SE1/4, Section 17 (T. 5 S., R. 20 E., S. B. M.). There is a large portion of the northern and northwestern segments of the area that has possibly been contaminated by unexploded military ordnance, a remnant from World War II maneuvers. There are several recorded mining claims located principally in the north-central and southwestern portions of the area. This WSA contains 30 percent dissected alluvial fans, 30 percent alluvial fans, 20 percent mountains, 10 percent sand dunes, 3 percent riverwashes, 3 percent sand-covered fans, 2 percent hills, 1 percent pediments, and 1 percent playas.

WILDERNESS QUALTIY

Description Of Environment

A few roads penetrate the area, including the old Arlington Mine Road from the east and others to active claims from the south and west into the Palen Mountains. The Palen-McCoy area embraces a series of rugged, low-lying mountain ranges and broad valleys laced with ironwood washes. Four distinct mountain ranges form the core of the area. The Palen Mountains form a sizable mass of metasedimentary and metavolcanic rocks, with considerable evidence of striations. The McCoy Mountains appear as a ridgelike mass of metasedimentary rock, also displaying a somewhat stratified appearance. To the north of these ranges rise the Little Maria Mountains, a small, but complex range composed predominantly of limestone. The Granite Mountains, a steep mass of bouldery, granitic rock, rise to the north of the Palen range. The vegetative covering of these ranges is uniformly sparse, consisting of brittlebush and creosote bush scrub for the most part.

One extensive interior valley is found in the area between the McCoy and Palen Ranges. This valley is characterized by extensive rolling bajadas of varnished desert pavement bisected by a complex system of sandy washes that

[1]Portions of Ts. 1, 2, 3, 4, 5, and 6 S., Rs. 17, 18, 19, 20, and 21 E., SBM.

support sizable stands of ironwood. The edges of the Palen-McCoy area embrace portions of several broad desert valleys: Palen Valley, west of the Palen and Granite ranges, may be characterized as a large alluvial outwash plain; Palo Verde Mesa, east of the McCoy Mountains, represents part of an old river terrace; and Arica Valley, to the north of the core ranges, may generally be described as a large, open pavement bisected by numerous sandy washes that support communities of ironwood, palo verde, and smoke tree. Palen Valley also contains a dry lake and a small but extensive system of sand dunes. The area also includes the Arica Mountains, a small, isolated range that is distinguished by a sand-swept western side and rugged eastern side with unusual erosional forms.

Natural Condition

Boundary adjustments have been made to exclude areas where man's impact negates both the natural character of the land and opportunities for solitude. Large areas laced with roads to active and abandoned mining operations, including tunnels, shafts, quarry pits, and surface scraping for ornamental rock, have been eliminated from further study. Such areas include the Arica Mountains, the south slope of the Little Maria Mountains, the southern McCoy Mountains area, the area east of the McCoy Mountains, the Arlington mine area, and the Palen Pass area. Other exclusions include: sites intensively used by Patton's tank corps, where large areas of desert pavement have been severely disturbed (especially between Palen Pass and the Arlington Mine Road); community developments and large tracts of non-public land around Desert Center; an area laced with roads constructed by Patton located north of the Granite Mountains; and a road to a quarry pit in Section 3 (T. 2 S. R. 18 E.), northeast of the Granite Mountains.

The remainder of the area generally appears to have been affected primarily by natural forces. Topographic variation throughout and vegetative screening in the valleys serve to reduce the impact of internal man-made features. Therefore, man's works, which include a few primitive ways, some abandoned mines, and Patton's tank tracks on some desert pavement areas, are substantially unnoticeable. The interiors of the Palen and Granite Mountains are especially pristine.

The adjusted boundary follows the roadless area boundary to the south, then skirts around non-public land and follows an unimproved way to the abandoned mining sites in the McCoy Mountains. The boundary proceeds northwest, encircles the Palen Pass/Patton area excluding patented mining claims at Section 24 (T. 3 S., R. 18 E.), follows the ridgeline of the Little Maria Mountains to a 2,400-foot peak, then angles off northeast to meet the Rice-Midland Road at Section 12 (T. 3 S., R. 20 E.). It follows the road northwest, skirts around the western side of the Arica Mountains, then northwest to the Colorado River Aqueduct property. The boundary then proceeds southwest across the southern edge of Sections 9 (T. 1 S., R. 9 E.), to the northern tip of the Granite Mountains where it joins with the western roadless area boundary. The boundary then diverges from the roadless area boundary from Section 36 (T. 3 S., R. 16 E.) to the southern boundary to avoid a large block of non-public land.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Outstanding opportunities for solitude and for a primitive and unconfined type of recreation are provided. The topographic variation within the mountains and the vegetative cover on the valley floors serve to screen out most outside influences, as do the dense ironwood stands.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 33 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

This description includes areas not identified as Wilderness Study Areas, but which may be Class C on one or more alternatives. There are seven areas of high potential in this WSA.

Ford Dry Lake KGRA. This WSA includes part of the Ford Dry Lake KGRA (Known Geothermal Resource Area). Water exceeding 130° F has been reported from shallow wells in this KGRA which is under active exploration and within an existing energy transmission corridor. The USGS Conservation Division reports a geothermal gradient about twice normal from test well FDL-1 of 80° C/Km.

Central Palen Mountains. Around the turn of the century, two mines in the central Palen Mountains produced undetermined amounts of rich ore containing up to 60 percent copper, plus silver and gold. This area is now under claim by Mid-America Mining Co., which is actively exploring for copper and silver. Geophysical data, tonal anomalies, lineament data, surface-oxidized zone mineralization, alternation, and rock types all combine to suggest an ore body below the surface. This area has extremely high mineral potential. Copper and silver are strategic minerals.

Northern McCoy Mountains. This area is mineralized and altered similarly to the copper deposits in the central Palen Mountains. Prior to 1918, the St. John mine produced an undetermined amount of ore containing up to 40 percent copper, plus gold and silver. Also in this area are at least 12 past producers of manganese, a strategic mineral for which there are no substitutes. The area had produced at least 25,000 short tons of ore by 1960. As late as 1977, small amounts of manganese ore were mined for use as a specialty welding flux. This area has very high potential for copper, manganese, gold, and silver.

Palen Pass. This area contains known resources of gypsum, a vital agricultural material; fluorspar, used in steelmaking; plus silica and copper. There are 39 active claims in the area. This area has high potential for gypsum and fluorspar.

Southwestern Palen Mountains. This area contains known resources of high-grade iron ore, and is a present producer of talc, a strategic mineral. This area has high potential for iron ore production and continued talc production.

Northern Palen Mountains. The Black Ace/Doran mine produced an undetermined but large amount of manganese ore, a strategic mineral, before 1960. This area has high potential for manganese deposits.

Arica Mountains. This area contains three formerly active mines which together have produced 1,174 ounces of gold, 534 ounces of silver, 6,911 pounds of copper, and 920 pounds of lead. This area has high potential for these strategic and imported commodities.

There are 12 identifications of medium potential in this WSA.

(a) The valley south of the Palen Mountains has an outcrop of clay, reported to contain bentonite, which is needed in oil-well drilling.

(b) The valley south of the Palen Mountains is a PGRA (Potential Geothermal Resource Area) under current exploration. The PGRA is in an existing energy transmission corridor and is topographically favorable for generating plant siting.

(c) There are reported copper deposits in the west-central and southern Palen Mountains. The reported occurrences may be mislocated and warrant field verification.

(d) The sedimentary deposits in the Little Maria Mountains have medium potential for salable dimension stone.

(e) Two manganese deposits are reported on the western lobe of the Palen Mountains.

(f) The western Little Maria Mountains contain deposits of limestone suitable for cement.

(g) The central Little Maria Mountains have reported occurrences of iron and copper. This area has medium potential and warrants field verification.

(h) Gamma-ray data and favorable rock types indicate medium potential for uranium in the southeastern Palen Mountains and in the central McCoy Mountains.

(i) Geochemical data indicate speculative potential for zinc, molybdenum, and lead in southeastern Palen Pass; cerium and molybdenum in the central Granite Mountains; and zinc in the northeastern Granite Mountains, although there are no known deposits of these elements.

(j) The valley north of the Granite Mountains is classified prospectively valuable for oil and gas by the USGS.

(k) Gamma-ray data indicate medium potential for thorium in the northern Little Maria Mountains and for uranium in the northeastern Granite Mountains.

(l) Ford Dry Lake has medium potential for saline deposits.

The remainder of the WSA has speculative potential for various commodities. The alluvial fans surrounding the mountains have speculative potential for sand and gravel, plus salable clays and other materials. The central McCoy Mountains and the central and north-central Palen Mountains have speculative potential for metallic deposits plus uranium and thorium. The northern Little Maria Mountains not otherwise classified have speculative potential for metallic deposits.

Vegetation

A small stand of crucifixion thorn occurs at the extreme southern end of Palen Valley. Crucifixion thorn is the only sensitive plant species known from this area. However, it is not considered rare in southern Arizona. The principal vegetation types of WSA 325 are creosote bush scrub and desert microphyll woodland.

Wildlife

There is considerable bighorn sheep use in this WSA. They occur in four mountain ranges: Granite Mountains, Little Maria/Big Maria Mountains, Palen Mountains, and McCoy Hills. Six square miles (100%) of the permanent range and 18 square miles (90%) of the seasonal range of the 15-member Granite Mountains herd are included. Nine square miles (5%) of the transient range in the Little Maria/Big Maria Mountains are also included. The Palen Mountains are also transient range; the WSA covers 60 square miles (90%) of this range. Bighorn sheep formerly occupied the McCoy Mountains; approximately 18 square miles (40%) of this range are also included.

Twenty square miles of foraging area for prairie falcons are also included. The Mojave fringe-toed lizard inhabits about one-eighth of the area.

Cultural Resources

Several areas of known cultural resources sensitivity/significance are located within this proposed WSA. Eight square miles of high significance are located in the southwestern portion of the polygon. Sites recorded consist of temporary camps and trails. Ten square miles of high sensitivity are located in the central portion of the WSA. Sites here consist of mostly historic mining remains. Twelve square miles of high sensitivity are found in the southern portion of the polygon. Sites include temporary camps, lithic scatters, trails, cleared circles, and isolates. One and one-half square miles of very high significance are located in the southeastern

portion of the WSA. Sites recorded include two trails and a rock art and sherd scatter. One square mile of high sensitivity is located in the eastern portion of the polygon. Sites include a temporary camp, trails, and historic sites.

Native American Uses, Needs, and Sites

The extreme southeastern extension of the WSA represents an area identified as Desert Cahuilla territory which contains a permanent village site, springs of ritual association, and burial locales. This area contains resources associated with various groups. An identified Mohave temporary camp and hunting area is located in the extreme southeastern section of the WSA. A Cahuilla occupation site is identified in the southernmost part of the WSA. A Chemehuevi trail passes through the extreme southern tip of this WSA. Several boundary markers pass through the WSA: Chemehuevi-Serrano Holchid Loma; and Mohave (Kroeber, p. 24, in Manners, 1972).

Scenic Quality

This huge area includes many scenic quality polygons. Visual quality ranges from high to low with the majority of sites falling into the medium-quality designation.

Most aspects of desert scenery can be found within these borders: mountains with steep jagged peaks, deep canyons, broad open valleys, and portions of a dry lake and small dunes. Vegetation varies as does the topography. Sparse throughout most of the desert, dense stands of ironwood can be found in the valleys.

Some intensity and variety of color can be found throughout. Striations resulting from erosion, plus soil and surface variation, and patchy vegetation are the primary color sources. Areas displaying above-average vegetative and color qualities can be found.

General Recreation

The rugged little Arica Mountains are located in the Palen/McCoy WSA and are rated high for their interpretive qualities. McCoy Springs, Palen Wash, and Palen Pass are additional interpretive sites all rated medium for their interpretive values.

Only one teaching and research site is in the WSA, and it receives one visit annually by a college or university.

Fair rockhound opportunities exist for quartz crystals and porphyry in the Lightfoot Mine site located within this WSA.

The Palen sand dune is a major sand dune feature, and public concern has been expressed for all major dune systems in the CDCA.

A small concentrated recreational use zone covering less than 1 square mile of area is located in this WSA. In 1978 only 363 recreational visitor use days were recorded for this area. Primary activities included camping, four wheel drive and motorcycle play and touring, and rockhounding.

Range Uses and Potential

This WSA contains portions of the proposed Rice Valley and Palen Allotments.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Most comments agreed with the findings. A large number urged the inclusion of the area north of the Little Maria Mountains and east of the Granite Mountains in the potential study area. This area has since been included. Other comments dealt with roads and mining activities which were excluded from the study area after further field checking.

Study Phase

Slightly over 100 comments discussing WSA 325 were received, many addressing specific areas within this very large polygon. Half of the comments supported wilderness study designation of the inventoried roadless area, mentioning frequently the geological diversity presented by its four distinct mountain ranges and the opportunities for solitude and protection of natural values afforded by its large size. Several recommended expansion of the inventoried area. The northeastern section of the WSA is wild and colorful, with exotic rock formations; in the central section of the WSA, evidence of Patton's World War II training maneuvers were starting to disappear. Regarding the exclusion of the tank track area, several argued for wilderness consideration because (1) the tracks are only a small part of the valley desert pavement, (2) wilderness inventory conducted by jeep, using these tracks, gives a distorted view of their dominance, and (3) tracks are not "impacts," but actually qualify as historical values.

Features in the inventoried roadless area deserving protection include: the largest concentration of ironwood in the desert; scenic value of the Big Maria Mountains, archaeological values at McCoy Springs; exotic rock formations; scenic values of the combination of mountains, sand formations, and broad valleys; the presence of such plants and wildlife as bighorn sheep, fringe-toed lizards, raptors, desert holly, the Palen Valley lily, the large bird population of Palen Valley; the presence of the largest pristine wash system in the desert; and outstanding opportunities for photography, hiking, and other related recreation.

Several other commenters suggested reducing the area to be considered for wilderness by designating only the pristine mountain ranges and eliminating the western strip and southern strip. Sights and sounds which intrude into the area and require boundary adjustments include: railroad; pipeline; general aircraft, particularly from Desert Center Airport; visibility of

Blythe at night; State Route 62 and I-10; Blythe OMNI. The extent and impact of private land holdings were felt to negate wilderness suitability of the area. The intrusive impacts of Patton's activities were noted. Two stone dwellings within the area were mentioned.

The existence of and need for several ways in the area was mentioned including: roads developed for fire control; motorized vehicle roads on the west face of the McCoy Mountains to be used for hunting, mining exploration, and recreation; vehicle access for a loop through the war games area; access to "Tom's Cabin," and Packerd Well for popular recreation sports; and Palen Pass road for ranchers, recreationists, and miners. Recreationists using vehicles found the area close to the Los Angeles-San Diego metropolitan area and Blythe area. Some valley areas had value as future enduro event sites. The dunes provide opportunities for dune-buggy recreation, which is important to Desert Center's economy. Travel on washes provides access to the area with little environmental impact, and education about impacts is preferable to closure of the area to vehicles.

Rockhounding families value the area for crystals, halite, calcite, selenite, and other minerals which might be destroyed or buried because of the effects of weather. Copper, gemstones, azurite, malachite, and chrysocolla also attract the many visitors who are retired and winter in Blythe; they might be adversely affected economically by a restriction of vehicle access. The area is dry and too large for hiking any distance. Wiley Well Road, the northern part of the McCoy Mountains, and the Palen Mountains are important to these users.

Mineral potential is another reason for a multiple-use designation. This includes deposits and potential deposits of uranium in the McCoy Mountains, where several companies have mined or seek use; iron veins in Sections 19 and 20, T. 5 S., R. 18 E.; pyrophyllite in Section 18, T. 5 S., R. 5 E.; and copper gypsum, and manganese generally. Oil, gas, and geothermal potential exists in this WSA.

Numerous public comments were received in response to the workbook. Several comments favored wilderness designation because of archaeological values, bighorn sheep habitat, and wildlife variety. Other comments recommended maintaining existing use as a motorized vehicle use area. One comment noted the need for further study of the area and suggested considering family recreation.

Draft Plan Alternatives

A variety of public comments specific to WSA 325 was received in response to the Draft Desert Plan Alternatives. Several agreed with the Protection Alternative. Others agreed with the Balanced Alternative. One agreed with the Use Alternative. Several commenters wanted more wilderness and suggested adding the desert holly sanctuary. Many commenters disagreed with the Balanced Alternative and recommended adding more nonmountainous wilderness and Chuchwalla Valley to this WSA. General comments included the recommendation to retain existing vehicle access routes for motorizedvehicles

and rockhounding. It was also suggested that the exploration for and development of oil, gas, and geothermal resources under the No Action Alternative are the best uses of this WSA.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

A large portion (approximately 35%) of the Palen/McCoy Wilderness Study Area (325) is recommended as suitable for wilderness designation. This portion includes the Palen Mountains. Its quality in terms of relative resource values is reflected in its high rating (33). It was recognized that conflicts exist between mineral resources and wilderness values, but it was decided that, within that portion of the WSA recommended as suitable, the value of the wilderness resource was more significant than the competing resources.

The Granite Mountains and a portion of the Little Maria Mountains are recommended for Class L. These areas contain natural and cultural values and minerals. It was determined that the known mineral resources, in addition to the potential, exceeded the wilderness values. The Class L designation would allow access for exploration and development and still provide protection for the cultural and natural resources which include a small herd of bighorn sheep.

The remaining area, approximately 45 percent, is recommended for Class M to allow for more intense mineral development and motorized vehicle recreation.

IMPACT OF PROPOSED PLAN

Most of the Palen-McCoy mountain and valley complex is recommended for Class C. Some relatively narrow portions of the study area are recommended for Class L, while much of the bajada lands and the northern Palens/ Palen Pass area falls within a Class M polygon.

The Class C designation would positively impact the wilderness values, which rated outstanding. Use of designated vehicle routes in the Class L areas would have slight-to-moderate adverse impacts on opportunities for solitude and primitive recreation. The Class M designation provides access on identified vehicle routes for recreational purposes and for mineral exploration and development, including some oil and gas development. Vehicular access on identified routes would significantly impair opportunities for solitude and primitive recreation, while mineral development would similarly impact naturalness. However, although the study area's wilderness values rated outstanding over-all, the high values are concentrated mostly within the Class C area, and, to a lesser extent, in the Class L area, where they would receive some protection.

WILDERNESS STUDY AREA 328

Coxcomb Mountains

GENERAL DESCRIPTION

The area (58,880 acres)[1] has an unusual shape because it is adjacent to Joshua Tree National Monument. Other boundaries include State Route 62 to the north, the Colorado River Aqueduct to the east, a major utility line right of way to the southeast, and the Colorado River Aqueduct to the west. The area consists mostly of public land. Non-public land parcels are few and widely scattered, except along the Colorado River Aqueduct where non-public sections are contiguous. The non-public lands account for about 10 percent of the entire roadless area. All of the contiguous lands along the Colorado River Aqueduct are under the jurisdiction of the Los Angeles Metropolitan Water District. In fact, the delineated WSA line includes one such area. There is a large area in the north and central portion that has possibly been contaminated by unexploded military ordnance, a remnant of Word War II maneuvers. This WSA contains 40 percent alluvial fans, 20 percent mountains, 15 percent hills, 10 percent sand dunes, 5 percent dissected fans, 5 percent sand-covered dissected fans, 3 percent sand-covered fans, and 2 percent pediments.

WILDERNESS QUALITY

Description of Environment

The area contains portions of two major mountain ranges with a "transition area" between. The Coxcomb Mountains rise sharply from the surrounding desert floor on the east end, with their jagged, granitic outline. The Pinto Mountains, on the west edge, have a more rounded form, although many of the slopes are steep. The Coxcomb Mountains grade westward into an area where small, granitic "boulder piles" abound, while the Pinto Mountains grade eastward into a valley with a small dry lake in the Clark's Pass area. Large alluvial fans slope away from the mountains. These fans are especially well-developed on the east side of the Coxcomb Mountains. Vegetation throughout the area is relatively sparse. Creosote and mixed shrubs dominate the bajadas and lower mountain slopes, becoming more sparse on the slopes.

Natural Condition

Boundaries have been adjusted to account for roads and to exclude from further wilderness study those heavily disturbed areas where the natural character of the land has been seriously degraded. The area west of the Iron

[1]Portions of T. 1 S., Rs. 13, 14, 15, and 16 E.; T. 2 S., R. 15 and 16 E.; and T. 3 S., R. 15 and 16 E., SBM.

Age mine and road has been excluded because of the effects of past intensive mining in that region. Dale Mining District is riddled with shafts, tunnels, slag piles, and road cuts, as well as the remains of old structures and equipment. The Iron Age mine contains several huge pits and covers a large area. There are very few areas within the mining district that could be considered natural. A high capacity powerline transects the southern portion of the Coxcomb Mountains. The maintenance road does not continue over the mountains. A few ways penetrate the area, but are substantially unnoticeable.

The boundaries of the Wilderness Study Area are common with the roadless area boundaries along Twentynine Palms Highway from the eastern boundary through Clark's Pass. It diverges and follows contours southwest to the northwest corner of Section 7 (T. 2 S., R. 13 E.). The boundary is common with the Joshua Tree National Monument to the Colorado River Aqueduct, following the diking to the powerline crossing. The boundary follows the base of the mountain around the southern Coxcomb Mountains and along the eastern boundary, excluding the flood dikes along the aqueduct. A way off of State Route 66, east of Clark's Pass, penetrates the area from north to south. Several other ways exist in the northeast corner of the area. One of these is very primitive and another leads to an old abandoned mine. Another way bisects the extreme northeast corner. The above ways have little effect upon the naturalness of this large area.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Throughout the portions of the area with wilderness characteristics, terrain variety and the relative absence of man's works create an environment containing outstanding opportunities for solitude and for primitive and unconfined types of recreation. Particularly in the Coxcomb Mountains and in the boulder-pile area, steep rock canyon walls and the complex pattern of the low, granitic mounds isolate the individual from others and from the outside world and provide a sense of remoteness from civilization and immersion into pristine natural conditions.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 23 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all these

that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has possible potential for metals. Data are insufficient to evaluate potential of other resources. No claims are recorded.

Vegetation

No unusual plant assemblages occur within WSA 328. Vegetation consists mostly of creosote bush scrub. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

The varied terrain and presence of two springs in the eastern portion of the Coxcomb Mountains provides habitat for a variety of wildlife species. This includes the northeastern sector of the range used by the Coxcomb Mountains bighorn sheep herd, estimated at 10 individuals and declining. Six square miles of bighorn sheep permanent range and 22 square miles of seasonal range for this herd are located in WSA 328. This includes 40 percent of the bighorn range in the Coxcomb Mountains. Eight square miles of former bighorn sheep range used by a population once present in the Pinto Mountains is also located here. This is about 7 percent of the Pinto Mountains former bighorn range.

The southeastern portion of the Coxcomb Mountains contains a single prairie falcon eyrie and 10 square miles of foraging area used by a nesting pair of falcons. Four square miles of desert tortoise range, containing populations at densities of 20 to 50 animals per square mile, is located in the southwestern Chuckwalla Valley.

Cultural Resources

Only one area of known cultural resources sensitivity is located within this WSA.

Native American Uses, Needs, and Sites

This WSA contains no known significant Native American resources. However, an area of concentrated Native American resources is located to the west of the WSA containing permanent and temporary village sites.

Scenic Quality

Overall scenic quality is "high." The primary feature in the south is the Coxcomb Mountains which, as their name implies, consist of a series of steep, craggy granitic peaks which give the mountain a jagged appearance. Some color is displayed in the vegetation and surface tones. In the north, the foothills, remnants of the highly eroded Coxcomb Mountains are granitic boulder piles scattered on an alluvial plain. The rocks are rough-textured with tan and red-brown accents. The area generally rated "high" with very

high scores for landform, uniqueness, and (in the north) influence of adjacent scenery.

General Recreation

The Coxcomb Mountains themselves are ranked "high" for their interpretive qualities. No other recreation resources are known to exist in this WSA.

Range Uses and Potential

There are no known range resources in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments generally agreed with the findings. Some indicated the presence of roads and mines which were excluded where detected.

An overwhelming majority of comments addressed the southern portion of the Coxcombs, stating that this portion met wilderness criteria. A few comments mentioned specific intrusions. After field checks, the applicable intrusion portions were excluded from the area meeting wilderness criteria.

Study Phase

Twenty-five comments were received for WSA 328; 14 favored designation of the area as wilderness and/or the inclusion of the southern Coxcomb Mountains into the wilderness inventory (now WSA 328A). The southern Coxcombs are rugged and have "parklike valleys" and habitat for bighorn sheep. The most common comment of those favoring designation of the Coxcomb Mountains Wildernesss Area was the area's contiguity to Joshua Tree National Monument and its complementing of the Monument's wilderness qualities. Ruggedness, habitats for kit fox and bighorn sheep, one-leaf pinyon pines, cat-claw, acacia, natural water tanks, opportunities for backpacking and scrambling, Class I air quality, and the transition zone between Sonoran and Mojave Deserts were all features mentioned by supporters of wilderness designation.

Some comments mentioned sight-and-sound intrusion which require boundary adjustments or deletion of the area from wilderness consideration: evidence of past military activity, Colorado River Aqueduct, State Route 177, transmission line, roads, evidence of mines, and of motorized vehicle use.

Several comments favored a designation of the area that would allow general recreational use, including four-wheel-driving, camping, hunting, trailriding, backpacking, picnicking, nature studies, and motorcycling. The area has historic sites to visit and is close enough to population centers for weekend use by city residents. Two comments mentioned rockhounding as good in the area. Another multiple-use concern was mineral potential; one comment listed the mines which were near the roadless area, indicating mineral potential in the Coxcomb Mountains.

A few comments were received in response to the workbook. They recommended excluding the area from wilderness consideration because it cannot be practically managed.

Draft Plan Alternatives

Several public comments specific to WSA 328 were received in response to the Draft Desert Plan Alternatives. One commenter agreed with the Protection Alternative, while another wanted more wilderness than is recommended in the Protection Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Wilderness Study Area 328, Coxcomb Mountains, is recommended as suitable for wilderness designation.

It was ranked high (23) in relative wilderness values and shares a common border with National Park Service Wilderness in Joshua Tree National Monument. These factors are desert-wide wilderness criteria and were primary considerations in the decision that the wilderness values were more significant than the competing resources.

This designation would also protect the known natural and cultural resources.

IMPACT OF PROPOSED PLAN

Most of the study area is recommended for Class C. A small portion of the study area in the northeast corner, is recommended for Class M.

The Class C designation would positively impact the wilderness values, which rated outstanding. Uses allowed in the Class M portion of the study area would have significant adverse impacts on wilderness values in that portion, but would have no significant impacts on the wilderness values of the study area as a whole. The relatively flat, open terrain in the Class M portion would provide little screening of impacts in that area. Nonconforming uses may also influence the adjacent wilderness values in the Class C area.

WILDERNESS STUDY AREA 328A

South Coxcomb Mountains

GENERAL DESCRIPTION

Located north of Desert Center, this area (8,532 acres)[1] is bordered on the northwest by a major utility line right of way, on the northeast by the Colorado River Aqueduct maintenance-access road, on the east and southeast by State Route 177, and on the southwest by a well-maintained road to the Dale Mining District. Approximately 20 percent of the area is non-public land. This WSA is 95 percent mountains and 5 percent alluvial fans.

WILDERNESS QUALITY

Description of Environment

This area contains the southern end of the Coxcomb Mountains. Elevations range from a low of about 600 feet on the bajadas to about 3,000 feet on the top of the mountains. Vegetation, consisting mostly of cresote and desert shrubs, is restricted primarily to the bajadas.

Natural Condition

Portions affected by man have been excluded from those areas containing wilderness values.The excluded portions include the northeast and northwest corners because of flood-control dikes, the bajada below the 1,000 foot contour line because of motorized vehicle tracks and ways, and the southern end because of a dumpsite.

The central core of the area, which contains the Coxcomb Mountains, has been affected primarily by natural forces with man's imprint substantially unnoticeable. The Coxcomb Tunnel for the Colorado River Aqueduct bisects the northern portion, but since it is below ground, it has no impact upon the naturalness of the surface area.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The rugged terrain of the Coxcomb Mountains and the naturalness of this portion provide outstanding opportunities for solitude and a primitive and unconfined type of recreation.

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[1]Portions of T. 3 S., R. 16 E. and T. 4 S., R. 16 E., SBM.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 81 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

Data are insufficient to evaluate geologic, energy, or mineral potential. No claims are recorded.

Vegetation

No unusual plant assemblages occur within WSA 328A. Vegetation consists mostly of types which occur on the flanks of rocky desert mountain ranges. Total cover is extremely sparse.

Wildlife

The WSA is used extensively as foraging area by prairie falcons. The northern end of the Chuckwalla Valley contains approximately 9 square miles of the range of the Mojave fringe-toed lizard, a sand-dwelling species of spotty distribution in the northern and central Mojave Desert.

A single spring, located in the northwestern portion of WSA 328A, is an important source of water to a variety of wildlife species, including several species of birds and mammals.

Cultural Resources

No area of known cultural resources sensitivity/significance are recorded in this WSA. Historic mining features may be sprinkled through the area, although actual density of sites will likely be quite low.

Native American Uses, Needs, and Sites

No known significant Native American resources are found within this WSA. A tentative Halchidhoma boundary line passes through the WSA. Traditionally, this region was used by the Cahuilla, Serrano, Cabazon Band (Cahuilla), and Chemehuevi.

Scenic Quality

Overall, scenic quality within the WSA was rated "medium." Although not as rugged in this area as they are to the north, the Coxcomb Mountains do enhance the scenery. Vegetation throughout is limited to typical desert shrub. Ironwood and palo verde can be found in the washes. Areas to the west show signs of severe impacts.

General Recreation

There are no known recreation resources within this WSA.

Range Uses and Potential

There are no known range resources in this WSA.

SUMMARY OF PUBLIC COMMENT

Inventory Phase

Comments generally agreed with the findings. Some indicated the presence of roads and mines, which were excluded where detected. An overwhelming majority of comments addressed the southern portion of the Coxcombs, stating that this portion met wilderness criteria and should be included in the inventory. A few comments mentioned specific intrusions. After field checks, the applicable intrusion portions were excluded from the area meeting wilderness criteria.

Study Phase

Of 25 comments received, 14 favored designation of the area as wilderness and/or the inclusion of the southern Coxcomb Mountains into the wilderness inventory (now WSA 328A). The southern Coxcombs are rugged and have "parklike valleys" and habitat for bighorn sheep. The most common comment of those favoring designation of the Coxcomb Mountains Wilderness Area was the area's contiguity to Joshua Tree National Monument and its complimenting of the Monument's wilderness qualities. Ruggedness, habitats for kit fox and bighorn sheep, one-leaf pinyon pines, cat-claw, acacia, natural water tanks, opportunities for backpacking and scrambling, Class I air quality, and the transition zone betwen Sonoran and Mojave Deserts were all features mentioned by supporters of wilderness designation.

Some comments mentioned sight-and-sound intrusions which require boundary adjustments or deletion of the area from wilderness consideration: evidence of past military activity, Colorado River Aqueduct, State Route 177, transmission line, roads, evidence of mines, and motorized vehicle use.

Several comments favored a designation of the area that would allow general recreational use, including four-wheel-driving, camping, hunting, trailriding, backpacking, picnicking, nature studies, and motorcycling. The area has historic sites to visit and is close enough to population centers

for weekend use by city residents. Two comments mentioned rockhounding as good in the area. Another multiple-use concern was mineral potential; one comment listed the mines near the roadless area, indicating mineral potential in the Coxcomb Mountains.

No comments on this WSA were received in response to the workbook.

Draft Plan Alternatives

One public comment specific to WSA 328A was received in response to the Draft Desert Plan Alternatives. It requested more wilderness than is recommended in the Protection Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The South Coxcomb Mountains Wilderness Study Area (328A) is recommended as nonsuitable for wilderness designation.

Since the WSA ranked relatively low (81) in terms of wilderness resource value and since it does not possess any of the qualities identified as desert-wide wilderness opportunities, it was decided that a multiple-use classification would be a higher use than wilderness. The area was recommended for Class L to protect those natural resources that have been identified and permit access to further investigate the geologic, energy, and mineral potential.

IMPACT OF PROPOSED PLAN

The limited use associated with the Class L designation would not significantly impact the wilderness values of this area. No vehicle routes exist in this study area, so none could be designated for access.

WILDERNESS STUDY AREA 334

Eagle Mountains

GENERAL DESCRIPTION

The northern border of this area (55,000 acres)[1] is formed by a maintained dirt road which joins Joshua Tree National Monument to Kaiser mining operations on the eastern border. The western boundary of this area is contiguous with a designated wilderness area in Joshua Tree National Monument. The eastern boundary includes maintained dirt roads, a portion of an industrial railroad, and a transmission line corridor right of way and access road. The southern boundary includes Interstate 10 and portions of the Hayfield Pumping Station road.

This area includes approximately approximately 12 sections of non-public land, scattered throughout the area and accounting for approximately 10 percent of the total land area. Portions of Sections 14, 23, 26, and 27, T. 5 S., R. 13 E., SBM, have been withdrawn by a protective withdrawal. In addition, there are several recorded mining claims in the northeastern portion of the study area. This WSA contains 50 percent mountains, 25 percent hills, 10 percent dissected fans, 5 percent riverwashes, 5 percent alluvial fans, 3 percent pediments, and 2 percent highly dissected fans.

WILLDERNESS QUALITY

Description of Environment

The extremely diverse Eagle Mountains cover most of this area. Large, exfoliated boulders of quartz monzonite make up the southern limits of these mountains. These "jumbles" of rocks contrast highly with the dark, jagged rocks found more in the interior of this area. Large interior washes and valleys, such as Big Wash, add to the complexity of the area. In some portions of the washes, vegetation is extremely thick and includes varieties of yucca, cactus, smoke trees, and various annuals.

Natural Condition

The vast majority of this area generally appears to have been affected primarily by natural forces, with man's imprint substantially unnoticeable. Within the interior and in the Big Wash area, only a few past mining activities are visible, and most do not detract from the primeval character and influence of the land. The patented Rainbow End mine and a patented mining claim located in Section 4 (T. 4 S., R. 14 E.) have been excluded. A large portion of the area in the northeast section was excluded from further

[1]Portions of Ts. 3, 4, and 5 S., Rs. 13 and 14 E., SBM.

wilderness consideration due to the extensive open-pit mine operations associated with the Eagle Mountain Iron Ore mine. The boundary of the Wilderness Study Area was adjusted accordingly. The extreme southern portion was also removed from consideration because of extensive private land ownership, flood-control dikes, and the permanent facilities and human habitations associated with the Hayfield Pumping Station.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Opportunities for solitude are outstanding within this roadless area because of the extreme ruggedness and diversity of the topography. Small canyons and boulder piles tend to create an intimate feeling of solitude, while some of the enclosed interior valleys and washes, combined with the ability of the vegetation to screen visitors from one another, allow a feeling of wide-open spaciousness. Associated with these varying types of solitude, the diversity of terrain and relationship to Joshua Tree National Monument wilderness offers outstanding opportunities for a primitive and unconfined type of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 35 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has possible potential for metals, uranium, and salable materials. The Eagle Mountain iron mine, currently in production, lies adjacent to the northern boundary. There are nine patented and numerous unpatented claims in the northern part of the WSA.

Vegetation

No unusual plant assemblages occur within WSA 334. Vegetation within the WSA consists mostely of creosote bush scrub and desert microphyll woodland. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

The varied topography of this WSA and the presence of three springs in the Eagle Mountains support a variety of important wildlife species including the desert bighorn sheep. The Eagle Mountains bighorn sheep herd is estimated at 15 individuals and is declining. The WSA contains 7 square miles (40%) of desert bighorn sheep concentration area, 7 square mies (30%) of permanent range, and 50 square miles (35%) of seasonal range for that herd. Overall, this comprises 40 percent of the total range of the herd. At least one prairie falcon eyrie and approximately 50 square miles of foraging area are also present here. The eastern edge of this WSA contains 5 square miles of the Chuckwalla Desert Tortoise Area, one of four core populations of this species in California. Population densities have been estimated at 20 to 50 per square mile.

Cultural Resources

Very little of this WSA has been surveyed for the presence of cultural resources. Nonetheless, three areas of cultural sensitivity are known. Along the northern border are found 2 square miles of very high sensitivity. Prehistoric remains can probably be found in the vicinity, and stoneworking tools and debris are predicted throughout this area.

Along the central portion of the southern boundary are located 6.5 square miles of very high cultural resources sensitivity. Within this area, 10 prehistoric sites have been recorded. The great majority of these are petroglyph sites. Perhaps an average of 5 prehistoric sites per square mile can be expected in this area. This is substantially greater than the norm for the general region.

Besides the areas mentioned, site densities will likely be quite low throughout the balance of the WSA, with perhaps an average of one site (historic mining, aboriginal campsite, or lithic) to be expected.

Native American Uses, Needs, and Sites

No known significant Native American resources are recognized within this WSA. A Chemehuevi boundary, known from historical documentation, passes through the southern portion of the area. This area traditionally was used by the Torres-Martinez Cahuilla and Cabazon Band (Cahuilla), as well as the Chemehuevi.

Scenic Quality

This WSA coincides with a scenic quality polygon which was rated "high." The heart of the Eagle Mountains is an interior plateau with broad, flat valleys and low rolling hills. The mountains have massive, smooth, rounded slopes and textured surfaces with colors ranging from golds and tans to brown. The area supports an outstanding range of vegetation. Washes with smoke trees, palo verde, and ironwood and slopes with ocotillo and Bigelow cholla are spread throughout the area. There are also dense stands of Mojave yucca and

cactus, particularly pencil and silver cholla. Key factors in this rating were vegetation, uniqueness, and lack of intrusions.

General Recreation

The King's Throne, a hilltop site where General Patton watched tank maneuvers during war games, is the only interpretive site in this WSA. It is rated "high" for its interpretive qualities.

Hunting opportunities are fair for chukar and quail.

A very small concentrated recreational use zone within this WSA accounted for only 143 visitor use days in 1978. Primary activities include four wheel drive and motorcycle play and touring and sightseeing.

Range Uses and Potential

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

The majority of public comments supported further consideration of this area as an extension of Joshua Tree National Monument. Several commenters supported the findings regarding roads and mining activity. Other comments opposed to inclusion of this area were too general to validate in the field.

Study Phase

Twenty-five of 48 letters on WSA 334 did not support inclusion of this area for wilderness study or recommended reduction in its size. Those supporting multiple-use designation described extensive mineralization in the area, including copper, iron, lead, metallic sulfides, borates, and precious metals deposits. Comprehensive studies, including aerial geophysical surveys, were strongly urged for this WSA and the entire desert area to determine mineralization prior to wilderness study designation. The geology of the area also attracts rockhounds, who account, desert-wide, for over 850,000 visitor use days annually, according to one estimate. In addition to considerable contributions to the State's economy, this activity is a vital recreational pursuit to its members, 42 percent of whom are over 50 years of age and require vehicles for access. Other comment letters described good camping, sightseeing activities, and motorized vehicle opportunities in the WSA. Sight-and-sound intrusions pointed out included: Eagle Mountain Railroad, Colorado River Aqueduct, Interstate 10, aircraft, and the Eagle Mountain mine. The area also has a past Fast Camel Race route.

Supporters of wilderness designation find several features which merit protection: extension of the values of the adjoining Joshua Tree National Monument, including Class I air quality; colorful metamorphic rock formations; oases of fan palms; bighorn sheep and mountain lion habitats and

other diverse flora and fauna, including spring floral displays and the ironwood stands in the southeast corner of the area; archaeological values, such as petroglyphs in the southwest corner of the area; nature study; educational values; rockclimbing; proximity to metropolitan areas; hiking, particularly a walk to Lost Palms from Cottonwood Springs; and access to roads to Joshua Tree National Monument.

Several comments were received in response to the workbook. They recommended that the area be joined with the Joshua Tree National Monument.

Draft Plan Alternatives

A variety of public comments specific to WAS 334 was received in response to the Draft Desert Plan Alternatives. Several agreed with the Protection Alternative. Another disagreed with the Balanced Alternative. General comments included the opinions that wilderness boundaries should be based upon ecological habitat and that buffer zones are needed around wilderness areas.

SUMMARY OF RATIONAL FOR THE PROPOSED PLAN

The Eagle Mountains Wilderness Study Area (334) is recommended as suitable for wilderness designation.

One determining factor in the decision was the area's over-all qualities which are reflected in the relatively high wilderness ranking (35). Another important consideration was the fact that the area joins National Park Service wilderness in Joshua Tree National Monument. This met one of the desert-wide wilderness criteria. It was decided that the area's value as wilderness exceeds the value of geology, energy, and mineral resources and general recreation resources. This designation would also protect the declining bighorn sheep herd, in addition to the three known areas of cultural sensitivity.

IMPACT OF PROPOSED PLAN

The Class C designation would positively impact wilderness values. The fairly restrictive uses allowed in the small Class L area would have no significant impact on the over-all wilderness values in this study area.

WILDERNESS STUDY AREA 334A

Pinto Basin

GENERAL DESCRIPTION

The northern and western boundaries of this roadless area (6,400 acres)[1] are contiguous with the Joshua Tree National Monument. The eastern boundary is a maintained dirt road. The southern boundary consists of a mining road. Approximately 30 percent of the area is non-public land, forming a slender, irregular shape near the middle. The western third is completely public land. This WSA contains 45 percent hills, 25 percent mountains, 20 percent riverwashes, and 10 percent dissected fans. Most soils in this WSA are highly sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

This area is characterized by boulders and rugged mountains dissected by numerous small canyons. A small portion of the relatively flat to rolling Pinto Basin is within the western portion and contains scattered creosote.

Natural Condition

The western third of the area is affected primarily by natural forces where man's imprint is substantially unnoticeable. In contrast, the eastern two-thirds is heavily impacted by extensive open pit mining scars. Numerous tunnels, shafts, and tailings lace this area, thus altering the natural appearance of the landscape. Roads to "satellite" mining and exploration areas radiate north and west from the Eagle Mountain mine, degrading the natural character of the mountains up to the ridgelines, where the border of Joshua Tree National Monument is located. The eastern boundary of the resulting study area has been adjusted westward to the first ridgeline of the mountains, near the Cactus mine.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The ruggedness and diversity of terrain, which tends to screen visitors from one another, as well as contiguity to Joshua Tree National Monument Wilderness, tend to create outstanding opportunities for solitude or a primitive and unconfined type of recreation.

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[1]Portions of T. 3 S., R. 13 E., SBM.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 76 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for metals and limestone. More than two patented claims are within the WSA.

Vegetation

No unusual plant assemblages occur within WSA 334A. Vegetation consists mostly of creosote bush scrub and desert microphyll woodland. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

This WSA contains approximately 2 square miles of seasonal range for the Eagle Mountains desert bighorn sheep herd, which includes about 15 individuals and is declining. This WSA includes about 2 percent of the seasonal range or about 2 percent of the total range of the Eagle Mountains herd. The lower valley slopes contain 3 square miles of range of the Mojave fringe-toed lizard, a sand-dwelling species of spotty distribution in the northern and central Mojave Desert.

Cultural Resources

Within this small WSA are 1.5 square miles of known very high sensitivity. This area falls along the eastern one-third of the WSA and is a portion of a larger cultural resources sensitivity area that extends eastward. Another rare rock art complex is known in this WSA. The "rarity" refers to the location of the petroglyphs, on small cobbles and boulders in the desert pavement. Prehistoric trails, temporary camps, and lithic sites are predicted in this area.

Native American Uses, Needs, and Sites

No known Native American resources are recognized within this WSA. This area was traditionally used by the Torres-Martinez Cahuilla, Cabazon Band

(Cahuilla), and Chemeheuvi. Anticipated resources would occur in the foothills and lowland areas in the northern reaches of the Eagle Mountains.

Scenic Quality

This small polygon in the northern portion of the Eagle Mountains reflects many of the outstanding scenic qualities of the area. Adjoining Joshua Tree National Monument, the area displays varied topography and an outstanding variety of vegetation. Relatively unintruded, the area displays scenic values comparable to adjacent areas of Joshua Tree National Monument. Scenic quality rated "high" with outstanding ratings for vegetation, uniqueness, and lack of intrusions.

General Recreation

Fair hunting for chukar and quail exists in this WSA.

Range Uses and Potential

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

A few comments were received supporting the inclusion of the west portion of the area for further wilderness study. The comments also urged the addition of portions of the mountains between Joshua Tree National Monument and the Eagle Mountain mine. However, mining activities affect the natural character up to the ridgeline, which coincides with the Monument border. Mining interests expressed concern that future expansion of current mining operations would be restricted by wilderness study designation. This concern is not an inventory factor.

Study Phase

Ten of 14 comments supported WSA designation for this small WSA. The area's contiguity to Joshua Tree National Monument makes it a good buffer between the monument and the active mining area to the east. The erosional patterns of the Coxcomb and Eagle Mountains and Black Mountaiin are scenic; the "angular gracefulness" protects the visual qualities of Pinto Basin. Some protective designation should prevent mining disfiguration from becoming visible from within the Monument --- "scenic stabilization zone," "National Monument buffer," or "National Monument completion zone" were alternatives of this type mentioned.

Comments supporting multiple-use suggested that the area's highest value was its mineralization. In the eastern two-thirds of WSA 334A, Kaiser and other mining operations conduct large open-pit operations with extensive equipment

on a daily basis; expansion of mining operations into the eastern third is necessary.

No comments were received in response to the workbook.

Draft Plan Alternatives

A variety of public comments specific to WSA 334A was received in response to the Draft Desert Plan Alternatives. Several agreed with the Protection Alternative. Another disagreed with the Balanced Alternative. General comments included the opinions that wilderness boundaries should be based upon ecological habitat and that buffer zones are needed around wilderness areas.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Pinto Basin Wilderness Study Area (334A) is recommended as nonsuitable for wilderness designation.

The WSA was recommended for Class L designation in the western 70 percent (approximately) and Class I designation in the remaining area.

The Eagle Mountains area has a history of mining and the eastern border of the WSA was determined by current mining activities. The Wilderness Study Area has a possible potential for metal and limestone. The area has also been identified as fair for hunting. Although the area is adjacent to wilderness in Joshua Tree National Monument, a desert-wide wilderness objective, it was felt that the geologic, energy, and minerals resources values were more significant than the wilderness values.

The Class L designation would allow access for mineral exploration and recreation while the Class I designation would permit an extension of the current mineral development. Within the Class L area, the natural resource values (bighorn sheep and Mojave fringe-toed lizard habitat) would be protected.

IMPACT OF PROPOSED PLAN

The study area is recommended for Class L to provide for the protection of natural values while permitting vehicle access on designated routes for mineral exploration. Vehicular use of these routes would have an adverse impact on opportunities for solitude and primitive recreation, while mineral exploration activities may adversely impact the natural character of the area. Depending upon the extent, the mineral activity may also adversely impact the wilderness values of the immediately adjacent existing wilderness in Joshua Tree National Monument.

WILDERNESS STUDY AREA 335

Pinto Mountains

GENERAL DESCRIPTION

The area (26,800 acres)[1] is bounded to the north by State Route 62, to the east by the graded Gold Crown Road, and to the south and west by Joshua Tree National Monument and a short segment of a paved road leading into the Monument from Twentynine Palms. Public lands predominate. Non-public sections occur in a widely scattered pattern and account for approximately 10 percent of the total area. This WSA contains 60 percent hills, 30 percent mountains, 5 percent alluvial fans, and 5 percent dissected fans.

WILDERNESS QUALITY

Description of Environment

Most of the area is dominated by steep but generally rounded hills, vegetated with creosote and mixed desert shrubs. Vegetation becomes more diverse in the washes, where it consists of smoke trees and other typical wash-type plants. Stands of Mojave yucca exist in many of the interior valleys. An extensive bajada skirts the northern edge of the mountains, sloping northward to non-public lands and homesteads and eventually to State Route 62.

Natural Condition

Certain portions of the area have been excluded from further wilderness consideration due to man's impacts, which affect the natural condition and limit opportunities for solitude or for a primitive and unconfined type of recreation. Such exclusions include the Music Valley mining area to the west; the Humbug Mountain mining area to the east; the Marbolite mine area; a well-graded road leading up to antenna installations on the north tip of Twentynine Palms Mountain; non-public property; and Small Tract Act homesteads to the north. The Music Valley area contains some stone walls, remnants of old stone cabins, tunnels, and some old stonework roads. The Humbug Mountain and Marbolite mining areas have sustained intensive mining activity in the past. The resulting road cuts, tunnels, slag piles, and structures are readily visible from most locations within the excluded area. The remainder of the area generally retains its primeval character. Most boundaries follow the top of the ridges, so the external features have little influence on the natural character of the interior.

[1]Portions of T. 1 S., Rs. 10 and 11 E.; and T. 2 S., Rs. 10 and 11 E., SBM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

In the non-excluded portions, opportunities for solitude are outstanding due to the variety of topography found in the mountains and the numerous enclosed areas. In addition, the adjacent Joshua Tree National Monument Wilderness Area expands opportunities for solitude and provides outstanding opportunities for a primitive and unconfined type of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 57 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for metals and uranium. About five unpatented claims are recorded.

Vegetation

No unusual plant assemblages occur within WSA 335. Vegetation consists mostly of creosote bush scrub. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

Bighorn sheep transient range covers 11 square miles (or 20% of the total range) in the Pinto Mountains, and there are 3 square miles of desert tortoise habitat with tortoise densities of 20 to 50 animals per square mile. The northwestern portion of the WSA contains 2 square miles of Mojave fringe-toed lizard habitat.

Cultural Resources

Eight square miles of very high sensitivity/significance are located along the eastern boundary of the WSA. All remains in this vicinity are related to historic mining activities. Settlements, mines, and processing sites are all known in this area.

Native American Uses, Needs, and Sites

Native American resources within this WSA are considered concentrated. Permanent and temporary village sites are identified within this area in the Pinto Mountains and eastern slope of Queen Mountain.

Scenic Quality

Scenic quality within the area was rated as "medium." These mountains are a large cluster of contiguous mountains which form an enclosed landscape with interior valleys and rolling hills. In general, the Pinto Mountains are a massive but rounded chain of dark-colored granitic rocks. Their smooth texture is broken by bands of rock. Vegetation reflects that found in the Joshua Tree National Monument.

General Recreation

No known recreation resources exist in or near this WSA.

Range Uses and Potential

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Most of the comments favored the area's inclusion for further study, based on wilderness value criteria and its location adjacent to Joshua Tree National Monument Wilderness. Many urged expansion of the boundaries through rehabilitation of the mining scars, although rehabilitation would require mechanical means. A few comments dealt with roads and mines, which have been excluded where appropriate.

Study Phase

About 35 comments were received regarding WSA 335. Those supporting further study of the area's potential wilderness designation mentioned most often its quality of protecting and adding to the adjoining Joshua Tree Monument. Many recommendations were made to extend the inventory area to the east and west, either excluding mining scars or allowing the abandoned operations to rehabilitate, which is already occurring, according to some. The elimination of the northwest portion, where a communication site exits, and a northern buffer strip for Morongo Valley settlement were other exclusions mentioned in conjunction with northern expansion recommendations. Hiking, rockhounding, scenic, ecological, and scientific values were mentioned generally as reasons for wilderness study designation, as well as indication of motorized vehicle damage.

Vehicle-related recreation, including camping, hunting, trailriding, photography, driving for pleasure, and prospecting were reasons given for

supporting multiple-use designation. This is a "great area for family ORV use," according to many, particularly in the western half. In general, the area's highest multiple-use value was felt to be for family recreation requiring vehicle access. Wilderness qualities were thought to be poor, with mining scars, general and military aircraft traffic, and Twentynine Palms visible at night. Gold deposits still exist here.

Several comments were received in response to the workbook. Opinions recommended wilderness designation and restrictions of motorized vehicle and motorcycle use. Another opinion favored maintaining existing use (mining) in the area.

Draft Plan Alternatives

The following comments specific to WSA 335 were received in response to the Draft Desert Plan Alternatives. One indicated complete agreement with the Protection Alternatives recommendations. A second thought the entire study area should be recommended as suitable for wilderness under the Balanced Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Pinto Mountains WSA (335) is recommended as nonsuitable for wilderness designation.

The WSA is located in an area that has been traditionally used for mining activity. The border meanders between ridgelines and was developed to exclude mining areas. These sites include the Music Valley mining area to the west and the Humbug Mountain mining area to the east. The Wilderness Study Area has potential for metals and uranium.

The area ranked 57 in wilderness values, and is located next to National Park Service wilderness in Joshua Tree National Monument. It was decided that the past use of the area, plus its potential value for mineral development were more significant that its value for wilderness, even though the area meets one of the criteria outlined in the desert-wide wilderness criteria.

The WSA is recommended for Class M designation to permit access for development of the mineral resources.

IMPACT OF PROPOSED PLAN

The study area is recommended for Class M which would provide for vehicular access on identified vehicle routes for recreational use and mineral exploration. Vehicle use of the identified routes would have an adverse impact on opportunities for solitude and primitive recreation, and mineral development would adversely impact naturalness.

WILDERNESS STUDY AREA 341

Santa Rosa Mountains

GENERAL DESCRIPTION

Situated in the Santa Rosa Mountains southwest of Indio, this area (136,100 acres)[1] is bordered on the east by private land and the roads and streets surrounding Indio. San Bernardino National Forest, Coyote Canyon Road, and Anza-Borrego Desert State Park define the boundaries on the west and south. State Routes 111 and 74 mark the northern extreme.

For the most part, the area is checkerboarded, approximately 50 percent public land and 50 percent non-public land. A fairly large tract of about 30 sections of contiguous public land occupies the mountaintop in the southeast corner of the area. This area has been retained for further wilderness study.

Public Land Order 5224 withdrew SE1/4SE1/4, Section 20, T. 8 S., R. 6 E., to the protect the recreational and public land values thereon.

This WSA contains 80 percent mountains, 10 percent hills, 8 percent dissected fans, and 2 percent pediments.

WILDERNESS QUALITY

Description of Environment

The area consists primarily of the Santa Rosa Mountains and foothills. These are rugged, boulder-strewn mountains displaying highly eroded canyons and washes, valleys, steep cliffs, and sheer surfaces. It is surrounded by a relatively short alluvial fan that slopes eastward toward the Salton Sea and contains part of the shoreline of the ancient Lake Cahuilla. Vegetation within the boundaries is diverse and ranges through the spectrum from desert (agave, ocotillo, creosote) to mountain (pinyon, juniper). Numerous life zones are included, and each reflects the unique plant life typical of the zone. The large public land tract consists mostly of the main Santa Rosa Mountain mass.

Natural Condition

The large area of contiguous public land has generally retained its primeval character and influence, with man's imprint substantially unnoticeable. The rugged terrain has limited access into the area, thereby protecting the area

[1]Portions of T. 6 S., Rs. 5, 6, 7, and 8 E.; T. 7 S., Rs. 5, 6, 7, and 8 E.; and T. 8 S., Rs. 5, 6, 7, and 8 E., SBM.

and allowing it to maintain its natural character. The public lands in the checkerboard pattern of ownership are included in the Wilderness Study Area. After consultation with California Department of Fish and Game, it was determined that such designation would be compatible with management of their lands.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The rugged mountain terrain and the dense and diverse vegetation patterns combine to produce numerous areas of isolation. The screening effect of these natural barriers ensures outstanding opportunities for solitude. The area is diverse enough to provide a wide variety of primitive-type recreation activities.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 4 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has possible potential for metals. Data are insufficient to evaluate potential for other resources.

Vegetation

No unusual plant assemblages occur within WSA 341. Vegetation within the WSA consists of a variety of types because of the broad elevational gradient in this area. They include creosote bush scrub, succulent scrub, desert chaparral, and California juniper-one leaf and four leaf pinyon woodland. No sensitive or significant plant species are known to occur within the WSA.

Wildlife

This region is habitat for a large population (estimated 500) of the Peninsular bighorn sheep, which has been listed by the State of California as rare. The area covers 50 percent (15 square miles) of its concentration range, 40 percent (45 square miles) of the permanent range, and 5 percent (18 square miles) of its seasonal range, for a total of 25 percent of the over-all range of the herd.

Two prairie falcon eyries are known in the area. Parts of this WSA are possible magic gecko range, and much of it is a mule deer concentration area. Nineteen springs are scattered throughout the area.

Cultural Resources

A number of known cultural resource sensitivity/significance areas are recorded within this WSA. Eighteen square miles of high sensitivity are located in the northern portion of the polygon. Sites in this region consist of sherd scatters, trails, and cairns. Two square miles of very high sensitivity are located in the northern portion of the WSA. Sites include roasting pits, milling stations, and rock alignments. Twelve square miles of very high sensitivity are located in the east-central portion of the WSA. Sites recorded include villages, temporary camps, rock shelters, milling stations, and trails. Two and one-half square miles of high sensitivity are found in the south-central portion of the WSA. Trails and rock alignments are recorded in this area. Thirteen square miles of very high sensitivity are located in the southwestern portion of the WSA. Sites recorded include temporary camps, milling stations, roasting pits, sherd scatters, rock art, and milling stations. Two square miles of very high sensitivity are located in the southeastern portion of the area. Sites included are mostly roasting pits.

Native American Uses, Needs, and Sites

The entire WSA exists within the traditional Cahuilla grounds, which is subdivided into nine clan territories. Native Americans have identified areas of habitation, collection, and ritual hunting within this area. A traditional Santa Rosa site, To-which-um, lies in the south-central section of the WSA. Various hunting and collection areas exist within the boundaries of the area: bighorn sheep in the extreme north and agave. A Cahuilla trail, identified from literature and ethnographic sources, follows an east-to-west line through the center of the WSA; an offshoot cuts due south through the west-central part of area.

Scenic Quality

The Santa Rosa Mountains are a steep, rugged chain projecting abruptly from the Coachella Valley. On the fans and in the canyons a wide variety of vegetation exists. Excellent displays and transitions are evident along State Route 74, which climbs rapidly from the valley floor to the summit.

This area is unique within the CDCA and rated extremely high in landform, color, and vegetation. Intrusions are rare and present little impact.

General Recreation

Bear Canyon palms and Martinez Canyon are two interpretive sites within this WSA and are rated "medium" in interpretive qualities. As many as seven additional interpretive sites yet to be evaluated are also within the WSA.

Good hunting opportunities exist for deer, quail, and chukar. This entire WSA is designated as a Primitive Area.

Range Uses and Potential

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Public comments overwhelmingly stated that this area is one of the most pristine and potentially spectacular wilderness areas in the desert. These comments will be evaluated in the study phase to determine if an enlarged area should be considered.

Study Phase

All but 11 of the 57 comments on WSA 341 supported wilderness designation of the area. A number of comments suggested it was one of the most outstanding wilderness candidate areas in the desert. Features mentioned which make the area appropriate for wilderness include: bighorn sheep; desert slender salamander; at least three rare plants, Santa Rosa sage, redshark chamise, agave; a variety of altitudes which provides more than one life zone (desert-high mountain transition area); good spring areas (Cactus Spring is outstanding); spring floral displays; difficult vehicle access; a "self-preserving" area; scenic vistas of the Salton Sea and Coachella Valley; proximity to metropolitan area; good "escape terrain"; fossil mammals; and unique educational opportunities and archaeological values. A "de facto" wilderness area, it should be considered for annexation to the Anza-Borrego Desert State Park, some feel. Its proximity to Anza-Borrego, RARE II lands, the Torres-Martinez Indian Reservation, and game reserves support its wilderness qualities. Class I air quality must be maintained. Specific areas noted in comment letters include Cactus Springs trails, Toro Peak, Martinez Peak, Coyote Canyon, Mexican Hat, and Horsethief Creek. A few letters described the detrimental effects of vehicles in such areas as this.

The extensive non-public land ownership was addressed. The cooperation of the Nature Conservancy and the willingness of the U.S. Fish and Wildlife Service to submit its holdings for wilderness designation were both noted. It was also suggested that school districts would benefit from a trade of their lands here for high revenue-producing lands elsewhere.

Objections to wilderness designation of the area included the following opinions: the cost of acquiring private lands would be prohibitive to overburdened taxpayers; the area's plant life is typical, not unique; the western and southern portions of the area should be eliminated from further consideration; the communications facility on Toro Peak negates wilderness qualities; the private land ownership pattern eliminates the area from consideration, according to FLPMA (Sec. 603) provisions, except for the southeastern portion; consideration should be given to the Water and Power

Resources Service flood control and related projects in the area; mineral resource development is a primary concern and provisions should be made to allow meaningful development on public lands withdrawn from multiple-use; geothermal potential exists within the area; opportunities for vehicle access are few and must be continued so that people can enjoy wilderness qualities--environmental impacts of such vehicle access would be minimal and obliterated by weather.

Numerous comments were received in response to the workbook. The vast majority of comments encouraged wilderness classification to protect the fragile ecosystem, expand the boundaries, and acquire the private lands. Other comments were opposed to wilderness classification because of the great amount of private land in the area, lack of control of motorized vehicles, and the agreement with the University of California.

Draft Plan Alternatives

Numerous public comments specific to WSA 341 were received in response to the Draft Desert Plan Alternatives. Several agreed with the Protection Alternative. One wanted more wilderness than was recommended in the Protection Alternative. General comments favored exploration for and development of oil, gas, and geothermal resources under the No Action Alternative as the best use of this WSA.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Santa Rosa Mountains Wilderness Study Area (341) is recommended as suitable for wilderness designation.

This area's value as a wilderness area is reflected in its wilderness ranking (4). It is also one of the closest WSAs to the Los Angeles metropolitan area. Both of these factors are important considerations and criteria identified in the desert-wide wilderness objectives. It was determined that the wilderness values were more significant than either the mineral or recreation values. This designation would also protect the known natural and cultural resources which are abundant throughout the study area.

IMPACT OF PROPOSED PLAN

Wilderness values would be positively impacted by the Class C designation.

WILDERNESS STUDY Area 343

Mecca Hills

GENERAL DESCRIPTION

This area (24,100 acres)[1] is bounded on the north by Interstate 10, on the east and southeast by the paved Box Canyon Road, and on the south-southwest by the Coachella Canal and a portion of a Riverside County maintained road. The boundaries include approximately 24 sections of scattered non-public land mostly in a checkerboard pattern and accounting for 35 percent of the total land area. Sections 14, 24, and 26, T. 6 S., R. 9 E., and Section 18 and NW1/4, and Section 30, T. 6 N., R. 10 E., were withdrawn on October 22, 1928, by Secretarial Order, as Recreational Withdrawal 16.

Also, by Secretarial Order of March 9, 1909, Sections 2 and 12, T. 7 S., R. 9 E., were withdrawn and reserved for the Torres Indian Reservation. There are a number of recorded mining claims in the eastern portion of the area. This WSA is 75 percent badlands, 15 percent highly dissected fans, and 10 percent dissected fans.

WILDERNESS QUALITY

Description of Environment

The majority of this roadless area contains the extremely colorful, deeply eroded, and sparsely vegetated Mecca Hills. Small, narrow, steep-walled canyons wind throughout this area, creating a natural maze within this badlands labyrinth. Sandy washes dissect the area and contain stands of ironwood, smoke tree, and palo verde, while scattered stands of ocotillo grow on the hilly slopes. Some portions of the Mecca Hills, known also as the Mud Hills, show evidence of the presence of the San Andreas Fault which has uplifted, adding to the erosion and breaking off huge rock slabs. The northern and western portions of this roadless area are more gently sloping and include large desert washes such as Thermal Canyon. This portion is either in private land ownership or checkerboard ownership, which creates areas of noncontiguous public lands.

Natural Condition

Within the solidly blocked portion of the Mecca Hills, man's work is substantially unnoticeable. This is an area where the earth and its community of life are undisturbed by man. Presently, the area is used by motorized vehicles, but much of the use occurs in the washes where visible alteration of the primeval character and influence of the land is not readily

[1]Portions of T. 6 S., Rs. 9 and 10 E.; and T. 7 S., Rs. 9 and 10 E., SBM.

apparent. Some primitive ways do exist on the hills and erosion has occurred on the steep slopes. Although these are visible, the intimacy and extent of the canyon systems within the Meccas greatly reduces man's imprint. The only portion within the Mecca Hills which has been excluded as not containing wilderness values is the Riverside County maintained road and campground in Painted Canyon. An airway beacon site and service road are located in this area south of Cactus City.

The Wilderness Study Area boundary is common with the roadless area boundary on the east, west, and south sides. The northwestern boundary follows a wash which cuts diagonally across the public/private boundary to near the beacon tower, then generally follows the contour at about the 1,600-foot level back to Box Springs Road.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Unlimited outstanding opportunities for solitude exist in the Mecca Hills due to the intricate passageways and complex canyon system which wind into the interior and tend to create a psychologically large area which effectively screens users from one another. Outstanding opportunities for a primitive and unconfined type of recreation experience is easily obtained. Diverse landforms and colorful and highly eroded, rugged terrain all add to primitive and unconfined movement.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 60 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has potential for iron, clay, geothermal resources, and oil and gas. There are unpatented claims in the northeast portion.

Vegetation

No unusual plant assemblages occur within WSA 343. Vegetation consists mostly of creosote bush scrub and desert microphyll woodland. One sensitive plant species (Ditoxis californica) occurs within WSA 343.

Wildlife

Most of this WSA (22 square miles) is seasonal range for bighorn sheep (Mecca Hills area). Fifteen percent of the total Orocopia Range is included in this WSA; all of the Range is seasonal bighorn habitat. About 5 square miles of the WSA is habitat of the flat-tailed horned lizard. Twenty-four square miles is a mule deer concentration area. One prairie falcon eyrie and the associated foraging habitat are in the area.

Cultural Resources

No known areas of cultural resources sensitivity/significance are recorded in this region. However, the area has not been surveyed, and its proximity to the Lake Cahuilla shoreline indicates a high probability that some prehistoric sites are located here. Site preservation is probably poor, however, due to the active erosion within the area.

Native American Uses, Needs, and Sites

The entire WSA lies within an area of both ritual and secular significance to Native Americans. Cabezon, a Cahuilla village, is located in the east-central portion of the WSA. Directly to the northeast of Cabezon village is a sacred area known as Quiaset, used for sacred prayer.

The Mecca Hills, Quawish-Ulish or Red Hills, also are of significance to the Cahuilla; Mecca Hills is a basalt material collection area as well (Knack, 1980, p. 48). The Serrano-Cahuilla territorial boundary runs east to west through the center of the WSA.

Scenic Quality

This area corresponds with three scenic quality polygons. The area was rated "high," receiving maximum scores for landform, color, and uniqueness. The scenery is one of great geological upheaval. Immense layers of strata have been tilted, folded, uplifted, and subsequently exposed by erosional forces. In some areas, the various colors of strata stand out vividly and contrast with each other. Vegetation is sparse in the hills, and a few species are found in the washes. Two roads, one paved, are the only intrusions in the study area.

General Recreation

The Mecca Hills are noted for their unusual geologic features as well as for the beauty of their rock formations. Within the Mecca Hills is the Painted Canyon, a rugged area where eroded hills and cliffs are significant landmarks. Both the Mecca Hills and Painted Canyon are rated "high" for their interpretive values. A third interpretive site in this WSA, the Box Canyon Road, is rated "medium" for its interpretive quality.

Good deer hunting opportunities occur throughout most of this WSA.

Three teaching and research areas receive from 4 to 8 visits annually. Pre-college, college, and university groups use these sites.

East of Mecca to Interstate 10 along Box Canyon road is a good floral display area of a desert wash community and unusual spring annuals.

The central portion of this WSA is identified as a "vehicle closed area" in the ICMP.

The southwest portion of this WSA is a designated Natural Environment Area. Portions of two concentrated recreational use zones exists within this WSA. In 1978, as many as 16,000 recreational vistior use days were recorded in these two zones. The primary activities in these areas include camping, picnicking, four wheel drive and motorcycle play and access, sightseeing, and shooting.

Range Uses and Potential

There are no range resources in this WSA.

SUMMARY OF COMMENTS

Inventory Phase

Comments against inclusion of this area in the wilderness study cited the history of motorized vehicle use. Field examination confirmed that evidence of this use was, for the most part, confined to sandy canyon bottoms and would pass with time; therefore, the impact was not long-term and would not impair the suitability of the area for consideration as wilderness. Other public comments addressed study phase considerations.

Study Phase

Twenty-two of 39 letters supported wilderness designation for this area; many mentioned its unique geological character. One commenter submitted a University of Arizona report, "The Mojave-Sonoran Natural Region Study," prepared for the National Park Service, which described the area as having the most diverse geology, concentrated in one place, of any area studied and felt it was of national park caliber. The narrow canyons are reminiscent of Canyonlands National Monument, according to another comment. Besides its geological wonders, the area has botanical attractions; backpacking and hiking opportunities; comfortable fall, spring, and winter weather; and little-researched prehistoric and historic values. Several recommendations for expansion were made; Sections 15, 16, 17, 20, and 21, T. 6 S., R. 9 E., were listed. The acquisition of the northwest Mecca Hills and Thermal Canyon is needed. Another suggested all of the polygon be acquired except the northwest part of Thermal Canyon to the microwave tower. The area complements Joshua Tree National Monument.

Opposition to wilderness designation came mostly from those who mentioned the above values but felt that vehicle access was necessary to enjoy them. A

number of recreational activities was mentioned, including hiking, camping, photography, nature study, geological study, and hunting. Commenters felt that motorized vehicle access is possible in the washes and would cause little damage; the geology of the area controls the extent of this use, as well as hiking opportunities. Sight-and-sound intrusions requiring boundary adjustment or deletion of the WSA include: I-10, pipelines, pumping stations, telephone and electric facilities, old State Route 195, cities of Indio, Coachella, and Mecca, and noise of shooters using the area. Concern for a utility corridor was mentioned. The removal of the southwest portion of the area, just east of the canal, was urged, in addition to a general concern for a corridor of a sufficient width through the area. The existence of geothermal potential in the area and the need for developing this resource were discussed.

Numerous comments were received in response to the workbook. Opinions stated included recommendations for a primitive camping area, but not wilderness; preservation of the area for educational use (research area). Other opinions stated that the area has been degraded by man's presence.

Draft Plan Alternatives

The following range of public comments specific to WSA 343 was received in response to the Draft Desert Plan Alternatives. Some comments agreed with the Protection Alternative; others wanted more wilderness than was recommended in the Protection Alternative. Other comments disagreed with the Balanced Alternative and wanted to add this WSA to those included as wilderness; they also wanted private lands to be acquired. General recommendations included protecting wildlife by designating the WSA as wilderness retaining vehicle access for hunting and protecting the geology of the area by designating the WSA as wilderness.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Approximately 70 percent of the Mecca Hills Wilderness Study Area (343) is recommended as suitable for wilderness designation.

The area ranked 60 in relative wilderness qualities. The area is relatively close to the Los Angeles metropolitan area and received the maximum score for uniqueness during the visual resource inventory. The area has potential for mineral, geothermal, oil, and gas exploration and development. The Mecca Hills provides many recreation opportunities. Interpretation education, research, hunting, and motorized vehicle use all take place within the borders. It was determined that the nearness to population centers and the area's uniqueness were significant factors and that the wilderness values exceeded those of either geology, energy, or mineral resources or general recreation.

The eastern 30 percent was recommended for designation as Class M. This will provide access for both mineral exploration and motorized vehicle oriented recreation.

IMPACT OF PROPOSED PLAN

Wilderness values would be positively impacted by the Class C designation. The Class M designation provides for mineral exploration and for recreational access on identified vehicle routes. Depending upon the extent of mineral exploration and development, topographic screening in this geologically diverse area should limit the adverse impact on wilderness values to a moderate level. Vehicle travel on identified routes would have a localized adverse impact on opportunities for solitude and primitive recreation.

WILDERNESS STUDY AREA 344

Orocopia Mountains

GENERAL DESCRIPTION

This roadless area (68,000 acres)[1] parallels the paved Box Canyon Road to the west and northwest Interstate 10 to the north, the Salt Creek Road and Kaiser Industrial Railroad to the east and southeast, and, to the south, the Bradshaw Stage Road and access road along the Coachella Canal and a woodpole utility line road. Sections of the non-public land forming a scattered checkerboard pattern account for approximately 35 percent of the total area. Approximately 7-1/2 sections in the northern portion of the area have possibly been contaminated by unexploded military ordnance, a remnant of World War II maneuvers.

This WSA contains 30 percent hills, 25 percent mountains, 15 percent alluvial fans, 10 percent highly dissected fans, 10 percent badlands, 8 percent dissected fans, and 2 percent riverwashes.

WILDERNESS QUALITY

Description of Environment

This area includes both the Orocopia Mountains and the southeastern portion of the Mecca Hills. The Mecca Hills include the often-visited Sheep Hole Oasis, Hidden Springs, and the grotto. Rugged, colorful canyon walls are highly varied and in some situations exhibit fresh fault scarps. The water found at Hidden Springs is a source for wildlife such as coyote, rabbits, and bighorn sheep. In the desert washes grow ironwood, palo verde, smoke trees, and the palm enclaves at Sheep Hole Oasis and Hidden Springs. The Orocopia Mountains are an extremely diverse and varied mountain landform. The northern portion is characterized by open valleys, dissected ridges, and an isolated mountain. The southern portion consists of highly colorful and dramatic eroded canyons and ridges. Vegetation is sparse but varied. In the open valleys are found creosote along with ironwood in the washes. Ocotillo is found on the hilly slopes; a small cluster of yucca is found near the Red Canyon jeep trail. Views of the Salton Sea are notable throughout the southern portion of this roadless area. The northeastern portion of this area contains a checkerboard pattern of noncontiguous public lands as does a portion of the interior of the Orocopia Mountains.

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[1]Portions of T. 6 S., Rs. 9, 10, 11, and 12 E.; and T. 7 S., Rs. 9, 10, 11, and 12 E., SBM.

Natural Condition

Much of this area is within a public land area closed to motorized vehicles and is an area which retains its primeval character and influence with man's imprint substantially unnoticeable. Some past mining activities have occurred in the Orocopia Mountains, but they are insignificant and have done little to nothing to alter the natural condition of the land. Some primitive ways do penetrate portions of this roadless area, but the majority are in washes or in areas where the immensity and ruggedness of the terrain remain the dominant features. In the northeast corner the natural character has been adversely affected by bulldozing scarps and motorized vehicle scars. The northern boundary also excludes the flood-control dike system south of Interstate 10 and flood-control dikes north of the Coachella Canal along the southern boundary. All of the checkerboard land ownership pattern in the area has been excluded from the inventory, as it does not contain contiguous public land.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The rugged character of the terrain and the diversity of landforms insure outstanding opportunities for solitude in both areas. Rocky outcrops and numerous canyons add to the ability of the landscape to screen visitors and add to the sense of isolation. Opportunities for a primitive and unconfined type of recreation are outstanding because of diversity and the ability of the terrain to ensure unrestricted movement.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 59 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all those claims that have been recorded with BLM.

This WSA has potential for talc, manganese, and other metals in the western and central portions, and geothermal and oil and gas resources in the western portion. There are no claims recorded.

Vegetation

No unusual plant assemblages occur within WSA 344. Vegetation consists mostly of creosote bush scrub and desert microphyll woodland. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

The Orocopia Mountains provide permanent range (8 square miles) and seasonal range (50 square miles) for a bighorn sheep herd of about 40 individuals. This is equivalent to 60 percent of the herd's permanent range and 40 percent of its seasonal range. Low desert tortoise densities (20 to 50 per square mile) are known to occur on about 70 square miles. There are two known prairie falcon eyries in the Orocopia Mountains. A mule deer concentration area of about 9 square miles is included in the area. Gray shrews are known to occur over about 8 square miles of the WSA.

Cultural Resources

Three areas of cultural resources sensitivity/significance are located within this WSA. One square mile of high sensitivity is located in the northwestern portion of the area. Known sites consist of temporary camps. One square mile of high sensitivity is located in the central portion of the area. Sites relate to historic mining activities in the area. One square mile of high sensitivity is located in the southeastern portion of the WSA. Sites include trails and historic remains.

Native American Uses, Needs, and Sites

This WSA contains Native American resources of both sacred and secular significance. The area of Hidden Spring in the northeast section of the Wilderness Study Area is both sacred and an old habitation site called Pa-Ha-Pe-Che. "Dos Palmas" or Par nes pa is a sacred place located on the extreme southern border of the WSA; it is known as a shaman initiation center and place of cremation and worship. A basket materials collection area is located in the entire western portion of the WSA (Knack, 1980, p. 48). The Serrano-Cahuilla territorial boundary runs east to west through the center of the WSA.

Scenic Quality

This area is broken into two units by a strip of privately owned land. The borders of these areas correspond to four scenic quality polygons.

The Orocopia Mountains are impressive but similar in appearance to surrounding mountains. Hidden within the canyons are numerous colorful geologic features, including stratified canyon walls, fault scarps, cliffs, and other diverse geologic formations. Vegetation is generally sparse and uniformly distributed throughout the mountains. Creosote is dominant, except in the washes, where smoke trees and palo verde can be found. The overall rating of the units is "medium."

General Recreation

Dos Palmas Spring and Hidden Springs are both fault-associated springs in the Orocopia WSA. Both these springs and a third site, Shaver's Well, are rated "medium" for their interpretive values.

Good deer hunting occurs in this WSA.

Part of this area is closed by the ICMP to motorized vehicle travel.

A small portion along the western border is identified as a natural environment area.

Over 20,000 visitor use daysof concentrated recreational use occurred in five concentrated use zones within this WSA in 1978. Recreational activities such as camping, four wheel drive play and touring, motorcycle play, sightseeing, picnicking, and hobby prospecting are the primary activities accounting for 80 percent of the total recreational use in this WSA.

Range Uses and Potential

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments received pointed out the popularity of the area to recreational vehicle users and the overall high natural value of much of the area. They also questioned the deletion of the extreme eastern end of the roadless area.

Study Phase

Forty-one of the 71 comments on WSA 344 recommended multiple-use designation of the area, or a considerable reduction in size of the WSA. Most of these felt the area's highest value was for recreation which required vehicle access. Cultural values, pleasant year-round climate, wildlife refuges, and scenic vistas provided outstanding opportunities for driving for pleasure, rockhounding, photography, hiking, and other activities for which at least initial vehicle access was needed and had been used extensively for in the past. A lack of water in the area would make family recreation impossible under wilderness management. The central areas, the Mecca Hills in the southeast portion, and the jeep trail to the Grotto and Hidden Spring in the northwest corner were noted as requiring access.

Commenters' other multiple-use concerns include the following: mineralization exists in the Orocopia Mountains; geothermal potential in the western third of the area should be explored and developed; provision for the Palo Verde-Devers transmission line is mandatory while the Palo Verde powerplant is being considered. Sight-and-sound intrusions noted include: noise from the bombing range, low-flying aircraft, Coachella Canal, Bradshaw

Stage Road, Kaiser Industrial Railroad, energy transmission lines, and I-10. The WSA area should be altered or deleted in view of these factors. Private land holdings in the area negate the legality of wilderness according to FLPMA (Section 603) provisions.

Besides the above natural values, supporters of wilderness also noted bird watching, geological study, bighorn sheep, accessibility to the interior by perimeter roads and hiking, the transition zone of the Colorado and Mojave deserts providing educational opportunities, a good primitive trail off of State Route 195, scenic rock spires in northeast section, the scientific value of the San Andreas Fault, unique conjunction of five distinct geological terrains, and historical mining sites inactive since the 1880s. Suggestions were made to acquire private land holdings in the central portion, south and east to the railroad tracks, to increase management effectiveness. The inclusion of the northeastern section as a buffer zone was urged. One suggested that the entire WSA was suitable for a WSA because of its solitude and recreational qualities. A suggestion was made to allow limited scientific access to Hidden Spring. High research values and the need for protection from vehicle damage may warrant a special designation.

Numerous comments were received in response to the workbook. A majority of opinions recommended: expanding the area to include the original roadless area; acquiring private lands; and protecting unique and diverse wildlife and flora. Other comments favored maintaining existing use of the area.

Draft Plan Alternatives

Several public comments specific to WSA 344 were received in response to the Draft Desert Plan Alternatives. All favored the Protection Alternative.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Approximately 70 percent of the Orocopia Mountains Wilderness Study Area (344) is recommended for wilderness designation.

The area ranked 59 in relative wilderness qualities. This area is located relatively close to the Los Angeles metropolitan area and other population centers in the Coachella Valley. This closeness is one of the qualities identified as one of the desert-wide wilderness opportunities. The entire area has potential for metals, geothermal energy, oil, and gas in the western portions.

The Orocopia Mountains are an extremely popular recreation area and opportunities exist for interpretation, hunting, and motorized vehicle activities, which account for the heaviest use. Although the WSA was not rated extremely high it was decided that its location along with its other resource values, enhanced its value as wilderness and, in that portion recommended as suitable, its wilderness value exceeded that of the competing resources.

The western portion of the study area is recommended for Class L and Class M. These classes would provide protection of resource values while permitting access for geologic, energy, and mineral exploration and development, and motorized vehicle recreation.

IMPACT OF PROPOSED PLAN

Most of the study area is recommended for Class C, resulting in a positive impact on wilderness values. The fairly restrictive uses allowed in the Class L portions will have no significant impacts on wilderness values, since the varied topography would screen or localize the visual impacts. Vehicular use of identified vehicle routes in the Class M portions would adversely impact opportunities for solitude and primitive recreation, but should have no substantial impact on naturalness, since previous vehicle use did not impair naturalness. Due to the steep-walled nature of much of the area, impacts would be limited primarily to the canyon floors.

WILDERNESS STUDY AREA 348

Chuckwalla Mountains

GENERAL DESCRIPTION

This roadless area (140,100 acres)[1] is bordered on the north by Interstate 10 and the Chuckwalla Valley Road; on the west by a gas pipeline right of way; on the south by a combination of the Chocolate Mountains Aerial Gunnery Range, a mining road, and the Bradshaw Stage Road; and on the east by the Graham Pass Road.

The boundaries include approximately 35 sections of scattered non-public land which accounts for approximately 10 percent of the land area. Public Land Order 5224 (Corn Springs) withdrew SE1/4SE1/4, Section 20, SW1/4SW1/4, Section 21, W1/2NW1/4 Section 28, and E1/2NW1/4, Section 29, T. 6 S., R. 16 E., from public entry for the protection of recreational and public values. There is a material site located on the nearby privately owned property within Section 36. There are a number of recorded mining claims scattered throughout the area. This WSA contains 30 percent mountains, 25 percent alluvial fans, 25 percent hills, 13 percent dissected fans, 5 percent highly dissected fans, 1 percent pediments, and 1 percent riverwashes.

WILDERNESS QUALITY

Description of Environment

This large area incorporates significant portions of two primary landscape types characteristic of this region's desert areas -- a mountain range of colorful, rugged rock ridges, boulders, and hills and a broad, expansive bajada dissected by ironwood washes. Numerous canyons intricately weave into the interiors of this roadless area. The southern portion, known as the Chuckwalla Bench, is the transition zone between the Colorado and Mojave Deserts. Thus, it contains a wide variety of vegetation which includes clusters of ocotillo, cholla cactus gardens, yucca, thick stands of creosote, barrel cactus, and nolinas. The area also contains large populations of desert tortoise, bighorn sheep, raptors, and abundant evidence of Ancient Man and Native American use. Portions of this area were classified as Primitive Area in 1972 by the Secretary of the Interior under the Bureau of Outdoor Recreation Classification System.

[1]Portions of T. 5 S., Rs. 14, 15, 16, and 17 E.; T. 6 S., Rs. 14, 15, 16, 17, and 18 E.; and T. 7 S., Rs. 16, 17, and 18 E., SBM.

Natural Condition

The majority of this roadless area is affected primarily by natural forces, with man's imprint substantially unnoticeable. The area, with a few exceptions, retains its primeval character and influence. Those exceptions have been excluded from that portion of the roadless area which contains wilderness values. An area approximately 1-1/2 miles wide along the mountain-valley interface along the northern border has been excluded for the flood-control dikes, many ways, motorized vehicle scars, and the patented Granite mine. A patented mining claim located in Section 15 (T. 6 S., R. 15 E.) has also been excluded. The mining road 1 mile south of the Model mine, in the southwest corner, and the area south of it has been excluded for mining roads, ways, and scars. The Red Cloud Canyon area and road, off the western boundary, has been excluded for patented mining claims buildings, ways, and mining scars. In addition, the road and the radio tower facility off of, and to the northeast of, the Red Cloud Mine Road has been excluded. The Corn Springs/Aztec Wells Road has been excluded, as have the community of Aztec Wells, the mining area south of the road and north of Pilot Mountain, Corn Springs Campground, patented mining claims, and the BLM storage building northeast of Corn Springs. The Dupont Road to and including the Aztec Mines area has been excluded for extensive mining scars. A mining road heading west off the Dupont Road to Section 12 (T. 7 S., R. 16 E.) has been excluded. Also a mining road south and west of the Aztec mine to Section 34 (T. 7 S., R. 16 E.) has been excluded. The area along the eastern border has been deleted for Patton's tank track scars. Lastly, the Chuckwalla Springs Road and the associated mining area at Chuckwalla Spring have been excluded for extensive mining roads, ways, and scars. There are several jeep trails penetrating the area from the southern border, but they have no significant effect upon the naturalness of this large area.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

This large, diverse mountain/ bajada roadless area contains outstanding opportunities for solitude and a primitive and unconfined type of recreation. Wide-open spaces and large interior valleys give a feeling of spaciousness while the rugged, narrow canyons and jumbles of rocky spires and ridges provide an intimate sense of solitude. These diverse types of solitude, varied topography and terrain, as well as complex ecological types and an abundance of animals and historical features, add to primitive recreational experiences. Several water sources are found throughout this area.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 56 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

This WSA includes the Chuckwalla Mountains and small alluvial areas to the northeast and southwest. Silver, copper, lead (all strategic minerals), and gold have been produced from this area. Zinc, thorium, and tungsten, also strategic commodities, occur within this WSA. Aside from these commodities, a geochemical survey indicated anomalously high amounts of the following elements: barium, boron, beryllium, cerium, chromium, cobalt, iron, lanthanum, lithium, manganese, molybdenum, niobium, strontium, tin, titanium, tungsten, vanadium, yttrium, and zirconium. Some of these anomalies may indicate mineral deposits. Geostatistical studies rate most of the area as having high potential for metallic minerals. There are tonal anomalies, mostly south of Augustine Pass. There are over 100 claims within this WSA.

There are many different indicators of mineralization within this WSA. Although a couple of former mining areas have been excluded from the WSA, many known and potential deposits are included in it. The excluded areas are not large enough to permit thorough mining of these deposits.

Vegetation

Two unusual plant assemblages are contained within WSA 348: the Chuckwalla Bench Munz cholla (Opuntia munzii) stand and the Corn Springs palm oasis. Otherwise, the vegetation of the WSA is predominantly creosote bush scrub and desert microphyll woodland. Several sensitive plant species occur within this WSA. The most important of these is Munz cholla, the largest cholla in the California Desert and known only from the Chuckwalla bench and parts of the Chocolate Mountains. The other species include Colubrina californica, Ditaxis adenphora, D. californica, Avenia compacta, Coryphantha vivipara var. alversonii, and Matelea californica.

Wildlife

The varied topography and relative abundance of water within this area, including at least six springs, support a diverse faunal assemblage. This area includes 32 square miles (100%) of permanent range and 100 square miles (75%) of seasonal range of the Chuckwalla Mountains desert bighorn sheet herd, estimated at 25 individuals and declining. The same area also contains approximately 150 square miles of mule deer range, where population densities are relatively high. At least one prairie falcon eyrie and 40 square miles of foraging area are also located here.

The valley floors and lower mountain slopes contain populations of the desert tortoise. Population densities include 90 square miles of 20 to 50 tortoises per square mile, 13 square miles of 50 to 100 tortoises per square mile, and 26 square miles of 100 to 250 tortoises per square mile. This area includes 120 square miles of the Chuckwalla Desert Tortoise Area, one of four recognized core populations of this species in California.

The Chuckwalla Bench supports what may be the best-developed Sonoran Desert community in the CDCA. It is an extensive area that supports a highly diverse flora and a number of important wildlife species and habitats. This includes four plant species which have been placed on the California Native Plant Society's (CNPS) "Inventory of Rare and Endangered Vascular Plants of California" (1980): the Alvoran foxtail cactus, California ditaxis, glandular ditaxis, and Munz cholla.

Cultural Resources

Two areas of known cultural resource sensitivity/significance are located within this WSA. Twenty square miles of very high sensitivity are located in the northwest portion of the area. Sites here include rock art, temporary camps, village, trails, rockshelters, and several historic sites. Twenty square miles of very high sensitivity are located in the southern portion of the WSA. Recorded sites include temporary camps, lithic scatters, milling stations, trails, and isolated finds.

Native American Uses, Needs, and Sites

The entire northern half of this WSA represents a general area of ritual significance. Numerous rock art sites and ritual localities exist in the Chuckwalla Mountains. The Corn Springs area is recognized as sacred by the Cahuilla by virtue of the numerous intaglios, petroglyphs, pictographs, and its ethnographic identification as a trade center. A Serrano-Cahuilla boundary (D8 1/20/60) and a Chemehuevi trail (DM 10/40) pass through the center and northeastern sections of the Wilderness Study Area, respectively.

Scenic Quality

The over-all scenic quality rating of the area is "medium." The Chuckwalla Mountains are diverse and provide different terrain opportunities. Generally rugged, they provide a jagged silhouette when viewed from a distance. Color tends toward "blotchy" earth tones on the exterior, but inside there are many areas of bright colors. Ridges and sideslopes are sparsely vegetated. Drainages contain a diversity of forms and species. Most scenic factors were rated as average or slightly above average.

General Recreation

The Chuckwalla Mountains themselves, the Corn Springs site, and the Jager Nature Center are within this WSA and are rated "high" for their interpretive values. Hunting opportunities in this WSA for deer, rabbit, and quail are rated as good. There are excellent rockhounding opportunities for calcite, chalcedony amydules, geodes, jasper, petrified wood, and crystal geodes. Portions of this WSA are designated as a Natural Environment Area or as a Primitive Area. One heavily used teaching and research site receives use by pre-college, college, and university classes eight or more times annually. Eight concentrated recreational use zones attracted over 15,000 visitor use days of recreational activity in 1978. Primary recreational activities

include camping, hobby prospecting, rockhounding, four wheel drive and motorcycle play and access, nature study, and hiking.

Range Uses and Potential

A portion of the proposed Ford Dry Lake Annex is in the WSA. Also, the Chuckwalla Herd Management Area is in the WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

The majority of comments addressing inventory criteria mentioned the effects of man. Other comments stated that the present boundaries were good. The area was reevaluated, and changes were made where appropriate. Other comments addressed the study phase.

Study Phase

About 70 comments addressed WSA 348. A study phase consideration was the proximity of the Chocolate Mountains Gunnery Range to the area. The flyover of military aircraft and the noise of heavy bombing and accompanying ground tremors were thought by some to nullify wilderness qualities for up to 20 miles from the range's border--it has "driven all wildlife in the area out." The railroad, transmission line, pipeline, radio towers, pumping stations, and interstate freeway were also mentioned as intrusions on qualities of solitude and naturalness. A multiple-use designation is desired for camping, photography, driving for pleasure, mine exploration, and four-wheel-driving. The area provides opportunities for advanced motorized vehicle users and is popular with Blythe motorized vehicle recreationists. Several specific vehicle access routes were recommended. A route up Augustine Pass is scenic and has walk-in possibilities for rockhounds. There is an aesthetic travel corridor from Corn Springs to Red Cloud mine, as well as general access for deer hunters and rockhounds, who note that Iris agate, geodes, jasper, and chalcedony are found here and thus consider this area a major destination. Area sites are mentioned in Strong's Desert Gem Trails. Mineralization, including gold, silver, and tungsten, and oil and gas, and geothermal resources exist in this area and require access for valid exploration. One commenter noted that the area contains less than 5,000 acres when private lands are excluded and thus should not be considered for further study. The area's flora and fauna are not unique, according to one comment. Since the eastern half is similar to WSA 350, it could be considered for deletion from this WSA.

Wilderness study designation supporters value the access, "vivid primeval character," and scenic and topographical diversity. The Chuckwalla Bench is considered a high priority area, with its overlap of desert terrains and indigenous wildlife. Corn Springs warrants protection for its support of native wildlife. Coryphantha vivipara and California ditaxis, as well as a rich variety of reptiles, spring annuals, and bighorn sheep and their habitats are supported by the area's diverse terrain and remoteness. Native

American trails are among the archaeological values present. Opportunities for scientific research are good. Hiking, backpacking, photography, nature study, and other recreational activities are rewarding; many spring sources provide water for extended stays.

Several comments were received in response to the workbook. The majority of comments recommended the area be left open for rockhounds, thereby maintaining existing use of the area. Other comments recommended wilderness designation because of the area's important transition zone between the Mojave and Colorado Deserts.

Draft Plan Alternatives

A variety of public comments specific to WSA 348 was received in response to the Draft Desert Plan Alternatives. Some comments agreed with the Protection Alternative. Other comments agreed with the Balanced Alternative. Still others agreed with the Use Alternative. Several commenters wanted more wilderness than was recommended in the Protection Alternative. Several commenters disagreed with the Balanced Alternative and instead favored more mountainous wilderness. General comments included the desire to retain existing vehicle access routes for rockhounds and to allow exploration for and development of oil, gas, and geothermal resources under the No Action Alternative as the best use for the WSA.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

Roughly one-third of the Chuckwalla Mountains Wilderness Study Area (348) is recommended as suitable for wilderness designation.

Although not rated very high over-all, the portion selected is the mountain itself, considered the prime area within the WSA. It was decided that wilderness designation was the highest and best use of this portion of the WSA.

The area has a history of mineral development, and studies indicate a high potential for metallic minerals. The WSA is also a very popular recreation area and attracts thousands of recreationists each year. Many opportunities for general recreation, such as hunting, rockhounding, and motorized vehicle touring and play and for teaching and education are supported here.

Natural and cultural resources are an important consideration. The WSA includes a small, declining herd of bighorn sheep and its range, mule deer, at least one prairie falcon eyrie and foraging area, desert tortoise, and others. Two areas displaying cultural resource sensitivity are found within the borders.

The remaining two-thirds of the area is recommended for Class L. This designation would protect natural and cultural resources while permitting access into the area for motorized vehicle recreation and mineral exploration.

IMPACT OF PROPOSED PLAN

The mountainous portion of the area is recommended for Class C, thus benefiting the wilderness resource. The bajada portions of the study area are recommended for Class L, which provides for limited access on designated routes for vehicular recreation, rockhounding, and mineral exploration and development. Vehicular use of designated routes will have an adverse impact on opportunities for solitude and primitive recreation.

WILDERNESS STUDY AREA 350

Little Chuckwalla Mountains

GENERAL DESCRIPTION

The northern boundary of this area (47,800 acres)[1] parallels Interstate 10 and a portion of the Chuckwalla Valley Road; the western boundary is the Graham Pass Road. The border to the south is the Bradshaw Stage Road and a utility line right of way; and to the east, it is the Wiley Wells Road. The boundaries include approximately 20 sections of scattered non-public land which accounts for approximately 7 percent of the land area. This WSA contains 25 percent alluvial fans, 20 percent hills, 20 percent dissected fans, 15 percent mountains, 10 percent highly dissected fans, 5 percent riverwashes, and 5 percent sand-covered fans. Most soils in this WSA are highly sensitive to surface disturbances.

WILDERNESS QUALITIES

Description of Environment

This area includes the dark, elongated Little Chuckwalla Mountains and large, associated bajada which is sparsely vegetated with creosote and ocotillo. Some ironwood is found in the desert washes. Large, flat areas of desert pavement are notable throughout the northern portion of this roadless area.

Natural Condition

The vast majority of this area retains its primeval character and influence and generally appears to have been affected primarily by natural forces with man's work substantially unnoticeable. The western and northern portions of this roadless area have been excluded from that part of the area which contains wilderness values. Work is substantially noticeable in this portion and includes flood-control dikes along the south side of Interstate 10, as well as past military activity attributed to the Patton Desert Strike, which has left numerous tank and vehicle tracks upon the desert pavement and bajada. The developed Wiley Wells campground has also been excluded from consideration in the extreme southeast corner of the area. An extensive network of mining roads and scars. A jeep trail crosses the area in a north-south direction but has little effect upon the naturalness of the area.

[1]Portions of T. 7 S., Rs. 18 and 19 E.; T. 8 S., Rs. 17, 18, and 19 E.; and T. 9 S., R. 17 E., SBM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The rough, rugged volcanic and metamorphic Little Chuckwalla Mountains and the large expansive bajada combine to provide outstanding opportunities for solitude or a primitive and unconfined type of recreation. Small, narrow canyons and numerous washes enhance the ability of the area to screen visitors from one another. The diverse topography and lack of man-made improvements allow a freedom of unconfined movement.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 95 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

This WSA covers virtually all of the little Chuckwalla Mountains. It includes a perlite deposit which contains 1.5 tons of resources, including 388,400 tons of proven reserves.

There is active gold exploration on the northeast side of Graham Pass. Geochemical samples indicated anomalies in the following elements within this WSA: yttrium, niobium, titanium, zirconium, barium, chromium, and lanthanum. The Little Chuckwallas have a favorable geologic environment for metallic deposits. There are contacts between granitic rocks and younger volcanics (both extrusives and intrusives), and a series of tonal anomalies. There has been little exploration here. Further work, including exploration and remapping of the geology can be expected. There are at least eight unpatented mining claims within this WSA.

Vegetation

No unusual plant assemblages occur within WSA 350. Vegetation consists mostly of creosote bush scrub and desert microphyll woodland.

Wildlife

About 25 square miles in the Chuckwalla Mountains is 20 percent of the seasonal range for the local bighorn sheep population, estimated at 15 individuals. This is equivalent to 15 percent of the herd's over-all range. Half of this WSA has desert tortoise densities of 20 to 50 animals per square mile; the other half has 50 to 100 tortoises per square mile. A little over a third of the WSA is foraging habitat for paririe falcons. About 3 square miles are Mojave fringe-toed lizard habitat, and 30 square miles are in a mule deer concentration area. There are two springs in the WSA.

Cultural Resources

No areas of cultural resource sensitivity/significance are known for this region. However, the area has not been systematically surveyed. A number of sites can be predicted for this vicinity, because of the density of sites in the surrounding areas.

Native American Uses, Needs, and Sites

The only Native American resources within this WSA are boundary markers. The Serrano-Cahuilla boundary, as well as the Kamia-Quechan boundary passes in an east-to-west direction through the southern section of the WSA.

Scenic Quality

Scenic quality within this area varies between "medium" and "low." Generally, an over-all score would be "low" for the entire site.

The Chuckwalla Mountains display a variety of topography and color. The ridges and sideslopes are sparsely vegetated, while washes contain a diversity of plant types. The Little Chuckwallas are smaller, lack color, and have limited vegetation. The valley is a large, gently sloping area of limited intrusions. Scenic values are derived more from scale and panoramas available than from its individual elements.

General Recreation

Two interpretive sites of "medium" interpretive value, Wiley's Well and Graham Pass, and a site of "low" interpretive value, Little Chuckwalla Mountains mineral area, exist within this WSA.

Deer, rabbit, and quail hunting is good in this WSA.

This WSA has several rockhound sites ranging from excellent to fair in quality. Materials collected include chalcedony, calcite geodes, jasp agate, and petrified wood.

Much of this WSA is also designated as a Natural Environment Area.

Several small low-use concentrated use zones dot this WSA. The total recreational use received by all six zones in 1978 was slightly under 3,500 visitor use days. The primary recreational activities include camping, four wheel drive and motorcycle play and access, sightseeing, and rockhounding.

Range Uses and Potential

A portion of the proposed Ford Dry Lake Annex and the Chuckwalla Herd Management Area are in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments addressing inventory criteria were evenly divided between agreement with the area's inclusion and noting the many roads and trails missed in the draft inventory. After an additional field check, appropriate changes were made. A few comments dealt with study phase issues.

Study Phase

Comments supporting multiple-use noted the area's values for recreation, energy resources, and the utility corridors. "Family-type ORV use," four-wheel driving, deer hunting, camping, and related activities were mentioned often, occasionally with reference to local economic impact and winter visitors. One letter estimated visitors to the area at over 500 annually. Rockhounding was mentioned several times. The area is "too vast and steep for old people to climb" and contains, among other gemstones, chalcedony, moss plume, segenite, banded and iris agates, and jasper. The area would be a good motorized vehicle competition area, according to one comment; it provides light but challenging vehicle travel for experienced users, according to another. One person, noting an excellent ecological area of unusually high diversity of desert wildlife and vegetation, with rare migrant birds depending on oases and mesquite washes important to wildlife, believed that the area would support a low density of vehicle recreation. However, there should be control of numbers entering the area. Geothermal potential exists in the area. Some deletions were suggested for utility use, including rights-of-way for communications facilities, two pipelines, and the proposed Palo Verde power plant and transmission line. Features present which damaged or nullified wilderness qualities include the bordering powerline, with intrusions of up to 2 1/2 miles into the area, the Blythe OMNI to the northeast, and city lights visible from some high points. The need for vehicle access to maintain sparse water facilities was noted.

Wilderness designation was supported for protection of plant and animal resources, cultural values, and wilderness recreation opportunities. A good area to enjoy the "feel" of desert wilderness, it provides views of the vast bajada between the Chuckwalla and the Little Chuckwalla Mountains, it has extensive evidence of aboriginal settlements, and it is a transitional zone between flora of the low Colorado Desert and the high Mojave Desert. A Couch's spadefoot toad population exists here. Expansion of the proposed wilderness area to protect these values and the riparian/dune system to the north are considered necessary to some. The potential for motorized vehicle damage is noted. Agriculture was termed unfeasible, as the Sundesert power plant project has tied up water rights.

Several comments were received in response to the workbook. The majority of comments recommended multiple-use for rockhounding. Comments favored wilderness designation because the area encompasses outstanding wilderness and ecological values.

Draft Plan Alternatives

Numerous public comments specific to WSA 350 were received in response to the Draft Desert Plan Alternatives. Several comments agreed with the Balanced Alternative. Other commenters wanted more wilderness (the entire WSA) than was recommended in the Protection Alternative. A general recommendation included allowing exploration for and development of oil, gas, and geothermal resources under the No Action Alternative. Rockhounding and associated vehicle use were seen as better uses of the area than wilderness designation

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Little Chuckwalla Mountains Wilderness Study Area (350) is recommended as nonsuitable for wilderness designation.

The WSA includes a large perlite deposit with thousands of tons of known reserves and gold exploration is occurring in the northeastern portion of the area. Recreation opportnonities, both motorized and nonmotorized, are abundant and the area supports many activities. The study area does not meet any criteria identified as desert-wide wilderness opportunities. It was determined that geologic energy and minerals and recreation resource values exceeded those of wilderness.

It was recommended that the area be designated Class L and Class M. The area supports a variety of wildlife; to protect these resources the southwestern section (approximately 60%) was recommended for Class L. This would also provide limited access for mineral exploration and development and general recreation. The remainder of the area was recommended for Class M to allow more intense use by both resources, while still providing a degree of protection for other values.

IMPACT OF PROPOSED PLAN

Most of the southwestern portion of the study area, including the mountains, is recommended for Class L. Vehicle routes may be designated to provide recreational access, especially for rockhounding. Vehicular use of designated routes would have an adverse impact on opportunities for solitude and primitive recreation.

The remainder of the study area is recommended for Class M to allow for mineral exploration and development. There is geothermal potential from the foot of the Little Chuckwallas northward. Such activities occurring in these relatively open, flat areas would significantly affect the wilderness values in the area.

WILDERNESS STUDY AREA 352

Palo Verde Mountains

GENERAL DESCRIPTION

This area (40,400 acres)[1] is bounded on the north by Opal Hill Mine Road; on the west and south by the Coon Hollow-Milpitas Wash Road; and on the east by a transmission line right of way across the Palo Verde Mesa. The boundaries include approximately 25 sections of non-public land checkerboarded in the southern and western portions, which accounts for approximately 8 percent of the total land area. There are a number of recorded mining claims in the northwestern and western portions of the area. This WSA contains 65 percent hills, 20 percent highly dissected fans, 10 percent dissected fans, and 5 percent riverwashes.

WILDERNESS QUALITY

Description of Environment

This area includes rolling hills and steep, colorful, jagged volcanic mountain peaks. Small, narrow canyons lead into enclosed basins and intimate valleys. Although vegetation is sparse, large stands of ironwood are found in Milpitas Wash, and a small palm oasis is located at Clapp Spring. Large, vast flat areas of desert pavement surround much of the Palo Verde Mountains.

Natural Condition

The majority of this area is affected primarily by natural forces with man's work substantially unnoticeable. Rockhound activity is very much in evidence, but the ruggedness and dramatic rock spires far overwhelm the impact of man's alteration. Thus, the area retains its primeval character and influence. The northern portion of this area contains permanent facilities and human habitations in the form of the Opal Hill mine and numerous primitive ways and inactive mining claims. The portion north of a jeep trail has been excluded from wilderness consideration. The checkerboard portion at the southern end of the area has been excluded due to the non-contiguous land status, a road, and motorized vehicle impacts. The Wilderness Study Area boundary is common with the roadless area boundary on the east and west. The southern boundary is formed by private land. The permanent facility areas of human habitation, primitive ways, and inactive mining claims have been excluded from the northern portion of the area.

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[1]Portions of T. 8 S., R. 20 E.; T. 9 S., Rs. 19, 20 and 21 E.; and T. 10 S ., R. 20 E., SBM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Numerous small, winding canyons and enclosed valleys create an area able to accommodate primitive recreation uses, yet still offer outstanding opportunities for solitude or a primitive and unconfined type of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 42 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has known potential for manganese and possible potential for borite and uranium. About 120 unpatented claims are recorded.

Vegetation

No sensitive or significant plant species are known to occur within this WSA. No unusual plant assemblages occur within WSA 352. Vegetation within the WSA consists mostly of creosote bush scrub and desert microphyll woodland.

Wildlife

Bighorn sheep occupy the Palo Verde Mountains on 25 square miles of transient range; this is 80 percent of the transient range which occurs in these mountains. Ten square miles of desert tortoise habitat, with 20 to 50 tortoises per square mile, also occurs here. Prairie falcons have one eyrie and use 34 square miles of foraging habitat. Burro deer use an 18-square mile concentration area. One important wildlife spring is present. Nine square miles of the Milpitas Wash, a potential ACEC, occur in this WSA.

Cultural Resources

Within this WSA are two areas of known very high cultural resource sensitivity. Over-all site density should average at least 10 sites (overwhelmingly prehistoric) per square mile. Along the northern boundary are 15 square miles with approximately 45 recorded sites. These sites

include quarries, lithic scatters, trails, cleared areas, rockshelters, intaglios, and temporary camps.

Along the southwestern edge are 3 square miles of a much larger sensitivity area that extends to Milpitas Wash. One could expect about 15 sites (temporary camps, rockrings, lithic scatters, trails, and pottery scatters) per square mile.

Native American Uses, Needs, and Sites

The WSA represents an area where several territorial boundaries intersect. Two Serrano-Cahuilla boundaries, a Cahuilla-Diegueno boundary, and a Kamia-Quechan boundary all meet in the northwest section of the WSA. Ritual collection and mythological association locales are known for the Quechan, Cocopa, Maricopa, Halchidhoma, Chemehuevi, and Mohave.

Scenic Quality

The heart of this WSA is the Palo Verde Mountains. This WSA was rated "high" and received the highest scores possible for landform, color, and uniqueness.

Extremely rugged mountains with sheer cliffs and canyon walls, caves, and arches can be found. Bright earth tones and contrasting color displays of blues and violets are commonly found. The Milpitas Wash drains east to the Colorado River. The Wash area contains dense vegetation; at times it gives a wooded appearance. Vegetation shields most intrusions and softens the impacts.

General Recreation

All four interpretive sites in this WSA are, to date, unevaluated. The interpretive sites are Thumb Peak, Twin Buttes mineral area, Palo Verde Mountains, and Clapp Springs.

Two low-use teaching and research areas are within this WSA. They are used, on the average, once annually by pre-college, college, and university classes.

This WSA supports good deer, quail, and chukar hunting opportunities.

The Thumb Peak area provides excellent rockhounding opportunities for paisley agate, banded nodules, and moss agate.

A portion of the WSA is a Natural Environment Area.

Three recreational concentrated use zones are within or partly overlap this WSA's boundary. Over 2,400 visitor use days (VUDs) were spent in this WSA in 1978. Some use from a major overlapping concentrated use zone contributed some of the nearly 73,000 VUDs spent in this WSA. Sightseeing, hiking, rockhounding, and camping are the primary activities occurring in the use zones in this WSA.

Range Uses and Potential

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

The majority of the public comments dealt with study phase considerations such as oil, gas, and geothermal potential and rockhounding. Several comments substantiated the findings; others identified roads which were validated and included in the narrative and on the map.

Study Phase

Comments regarding mineralization in this area mention prospects for gold, silver, copper, mercury, barite, and manganese. Mineral interests point to the severe economic detriment that mineral withdrawal of the area would have on the nation and on Imperial County. Limiting of wilderness designation to ACECs and making provisions for mineral development on lands withdrawn from multiple-use are urged. Rockhounds mention the area's black and paisley agates, geodes, tarrite, and the agate terrace on the northeast side of the WSA. Access for collection and observation of the area's diverse geology, ironwood and Palo Verde washes, and scenic features is desired. Multiple-use designation is needed to pursue exploration for oil, gas, and geothermal resources, which are needed and will have insignificant environmental impacts. Sight-and-sound intrusions mentioned include; vehicle traffic, aircraft traffic, city night lights from Palo Verde and Blythe, and gunnery range noise. From higher vistas these intrusions include: river developments, transmissions lines, and aircraft beacons. The U.S. Water and Power Resources Service mentioned the need for quarry areas for riprap for Colorado River project maintenance. San Diego Gas and Electric Company commented on their probable need to expand the eastern border's transmission-line corridor for future energy transmission needs.

Supporters of wilderness designation described the area's excellent qualities for naturalness and often mentioned the area's opportunities for solitude and unconfined recreation, particularly hiking. Also noted were scattered desert toad populations. To improve the area's quality of solitude, the addition of the northeast section of the area for wilderness study was recommended.

Several comments were received in response to the workbook. The majority of comments recommended maintaining existing status and leaving the area open to campers and rockhounds. Another commenter recommended moving the eastern border to exclude a portion of land.

Draft Plan Alternatives

Several public comments specific to WSA 352 were received in response to the Draft Desert Plan Alternatives. One agreed with the Protection Alternative. Another agreed with the Balanced Alternative. Other comments disagreed with

the Balanced Alternative and recommended adding this WSA to the proposed wilderness. General comments include the opinions that rockhounding and mineral exploration and development are a better use of the area than wilderness.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Palo Verde Mountains Wilderness Study Area (352) is recommended as nonsuitable for wilderness designation.

The area has a known potential for manganese and a possible potential for other minerals. The area is a very popular recreation site and supports a multitude of activities, which include camping, sightseeing, hiking, and rockhounding. There are areas of very high cultural resource sensitivity and high natural values. Based on this information and the area's relative wilderness ranking of 42, it was determined that the general recreation values and geology, energy, and mineral resources were of more significance than the wilderness values.

The area was recommended for Class L (approximately 90%) and Class M designation. The Class L designation permits access for both recreation and mineral exploration and development while still protecting the known natural and cultural resources. That portion in the eastern section of the WSA was recommended for Class M to allow increased access for mineral exploration.

IMPACT OF PROPOSED PLAN

Most of the study area is recommended for Class L. The restrictive use associated with this designation would result in slightly adverse impacts to wilderness values. Use of designated vehicle routes could impair opportunities for solitude.

A small portion of the area along the eastern edge is recommended for Class M to allow for vehicular access on identified vehicle routes and for mineral exploration. Such uses would result in moderately adverse impacts to opportunities for solitude and primitive recreation and to naturalness, respectively.

WILDERNESS STUDY AREA 355

Indian Pass

GENERAL DESCRIPTION

The area (27,300 acres)[1] is located beside the Colorado River between Blythe and Yuma. Its western boundary is formed by State Route 78 and S-34; the southern border is Indian Pass Road. The eastern boundary is the edge of the California Desert Conservation Area; the short northern border is Walters Camp Road. The northern portion of the area, roughly north of Quartz Peak, is checkerboarded with public and non-public land. In the southern area there are three sections of non-public land, which account for approximately 5 percent of the total land area. On both the eastern and western edges of the area there are a number or recorded mining claims. The southeast corner of the area is within the Picacho-Colorado River National Cooperative Land and Wildlife Management Area withdrawal under Public Land Order 2816. This WSA contains 50 percent hills, 20 percent mountains, 15 percent highly dissected fans, 10 percent dissected fans, and 5 percent alluvial fans.

WILDERNESS QUALITY

Description of Environment

This relatively large area encompasses a large variety of terrain. A great deal of land is flat to low rolling hills, laced with washes of all widths and depths. Scattered, rugged, low mountains, canyons, and highly eroded surfaces occur throughout the area. Plant cover varies considerably with location and elevation. The entire spectrum, from sites entirely void of vegetation to areas with relatively dense coverage, is mixed throughout. Vegetation in the washes reaches deep into the area from the heavily vegetated Colorado River area. Creosote, mesquite, smoke trees, and catclaw, plus a variety of low desert shrubs and grasses abound in many areas.

Natural Condition

The boundary of the Wilderness Study Area is common with the California Desert Conservation Area boundary on the east, north to the checkerboard land pattern. From that point, it extends west following the bottom edge of the private land for approximately 5 miles and then southwest along a short mining road in the northern portion of Peter Kane Mountain; from here southeast along the Julian Wash Road to Section 6 (T. 13 S., R. 21 E.). The Wilderness Study Area excludes the mining activity in Julian Wash. The boundary crosses the Black Mountains east of the repeater site, excluding that site and associated roads and powerlines. It then skirts around the

[1]Portions of T. 12 S., R. 20 and 21 E.; and T. 13 S., R. 20 and 21 E., SBM.

base of the Black Mountains to Indian Pass where it follows the jeep trail in Gavilan Wash back to the California Desert Conservation Area boundary. A small area has been excluded just northeast of Indian Pass because of mining scars.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

This relatively remote area offers a variety of topography and vegetative screening. Rapidly changing landforms, rugged surfaces with deep, twisting washes, valleys, and canyons, in addition to areas of heavy vegetation, provide numerous challenges to visitors.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 65 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

This WSA covers Quartz Peak, part of Peter Kane Mountain, and extends south to Indian Pass.

The geologic environment is very favorable for copper mineralization in the southern and western parts of this area. There are occurrences of copper mineralization within the northwestern part of the WSA, and rocks hosting 8-10 occurrences continue into the southwestern part of the WSA. There has been intermittent exploration for copper over the past five years. There are at least 20 recorded claims within this WSA as of December 31, 1979.

Vegetation

No unusual plant assemblages occur within WSA 355. Vegetation consists mostly of creosote bush scrub and desert microphyll woodland. No sensitive or significant plant species are known to occur within this WAS.

Wildlife

The mountainous portion of the WSA provides habitat for concentrations of a bighorn sheep herd. About 11 square miles, or 10 percent, of the 95-member Vinegre Wash herd's concentration area occurs here. An additional 27 square miles (60 percent of the total) are permanent range. Burro deer occur over the entire WSA. The local population numbers 200; approximately 20 percent of its range is overlapped.

Cultural Resources

Eighteen square miles of high sensitivity/significance are located in the WSA. Sites recorded in this area include a village, temporary camps, lithic

scatters, sherd scatters, milling stations, trails, and isolates. The entire WSA is highly sensitive.

Native American Uses, Needs, and Sites

This WSA contains significant Native American sacred, mythological, and Quechan clan resources. A sacred Halchidhoma hunting area lies in the extreme northwest portion of the WSA of Quartz Peak. Just inside the western border of the WSA is Black Mountain, which is associated with the Coyote (Kunyih) clan of the Quechan. Burials are found in this area as well.

Scenic Quality

The borders include a large area with varied topography. The southern part displays portions of jagged buttes, spires, and lava-capped mesas, displaying rich surface colors through the sparse vegetation. The northern area contains steep-sloped but less jagged and smoother mountains. Vegetation is denser and includes several species of cactus, ocotillo, creosote, and mixed desert shrubs, along with smoke trees, ironwood, and palo verde in the wash areas.

Overall, the area has a "high" scenic quality rating with landform, color, and uniqueness receiving higher-than-average ratings.

General Recreation

Gavilan Wash is very scenic, with spectacular erosion features. It is located in the Indian Pass WSA and rated as "low" for its interpretive value.

Excellent hunting exists throughout the area for deer, quail, and rabbit.

Good rockhounding opportunities for chalcedony roses, black agate, calcite nodules, geodes, and opalite exist along the northwestern border.

Portions of this WSA are in a Natural Environment Area and Primitive Area.

Small parts of two concentrated use zones overlap into this WSA. A total of nearly 19,000 recreational visitor use days were recorded in these zones in 1978. Primary recreation in these areas includes camping, four wheel drive touring and access, sightseeing, motorcycle play and touring, rockhounding, and hunting.

Range Uses and Potential

A portion of the Pichaco Herd Management Area is in the WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments pointed out the extent of man's imprint in the northern and southwestern portions and the naturalness of the core. Field checks validated these comments, and appropriate changes were made.

Study Phase

Several qualities worthy of wilderness protection were noted. Gavilan Wash contains California ditaxis; Milpitas Wash has excellent scenic variety, the finest example of a palo verde-ironwood association in California, with significant scientific and educational value; and Julian Wash has high scenic and archaeological values. Several suggestions were made to include Vinegre Wash for wilderness consideration. The area's diverse vegetation includes rugged cholla, Opuntia bigelovii, mesquite, creosote, and palo verde. Wildlife noted includes: Colorado River toad, Great Plains toad, tree lizard, and Yuma rattlesnake. The penetration of Colorado River flora and fauna into this area's washes is a rare California desert phenomenon that warrants protection from vehicle damage. The proximity of the Colorado River also provides a unique recreational opportunity to combine canoeing and wilderness hiking into a "special area with a unique flavor." Some noted that river-oriented wash areas were rare among California desert wilderness candidates and that extensions to protect wash areas to the north and buffers to the wildlife preserve were needed, with exclusions for microwave towers and mining scars, and arrangements made for Southern Pacific land exchanges. Some felt the exclusions of the northern section were a management consideration not appropriate during the inventory phase.

The scenic, archaeological, and wildlife values of the area's wash systems were also mentioned by the many rockhound enthusiasts who use these areas to explore for and collect jasper, agate, dumortiertite, and petrified palm root and fiber, among others. Many felt that at the least, a vehicle corridor into the beautiful Julian Wash is needed for this recreation. The Wallace geode beds were also mentioned. Julian Wash was also viewed as good for prospecting and mining. Copper and perlite mineralization exists in this WSA. Excellent opportunities for family camping and four-wheel-driving exist in the area, and hunting for dove, quail, and deer is good. Boy Scout camping expeditions, requiring partial vehicle access, have occurred here. A comment was made that there are no true roads in Imperial County outside the farming areas; ways are primitive and constantly eroded by flash floods but are important as motorized vehicle access to the activities of hunting, fishing, mining, boating, etc. Rockclimbing among the area's crumbly rocks is treacherous and lack of water precludes hiking.

Other multiple-use concerns include: right of way access for Pacific Telephone Company; riprap sites on the eastern border for Colorado River project work; and oil, gas, and geothermal resource exploration access.

Numerous comments were received in response to the workbook. The vast majority encouraged wilderness classification to protect the fragile desert wildlife. Others recommended that the boundaries be expanded north. Some commenters opposed wilderness classification because the access routes are inadequate and existing routes should be permitted for access to the area.

Draft Plan Alternatives

Several public comments specific to WSA 355 were received in response to the Draft Desert Alternatives. One agreed with the Protection Alternative. Others agreed with the Balanced Alternative. One commenter wanted more wilderness than was recommended in the Protection Alternative. General comments included the recommendation to retain existing vehicle access routes.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Indian Pass Wilderness Study Area (355) is recommended as suitable for wilderness designation.

Although the area was not rated high and it does not possess specific qualities identified as desert-wide wilderness opportunities, it was decided that the highest and best use of the area would be wilderness. It was recognized that conflicts between recreation uses exist and that the area shows signs of being formable for copper mineralization.

The relatively large bighorn sheep herd (95 members) and burro deer concentration (200 members) would benefit from the designation. The 18 square miles of highly sensitive cultural resources and the sacred Native American resources would be protected.

IMPACT OF PROPOSED PLAN

Since the study area is recommended for Class C, the wilderness values, which rated good, will benefit from the designation.

WILDERNESS STUDY AREA 355A

Picacho Peak

GENERAL DESCRIPTION

The area (6,982 acres)[1] is located beside the Colorado River near Yuma, Arizona. The area is bordered on the northwest by the Indian Pass Road; on the northeast by the Picacho State Recreation Area; on the east by Pichacho Road; on the southeast by the road from elevation 423, in Section 22 (T. 15 S., R. 22 E.), west and southwest to a utility line in Section 10 (T. 16 S., R. 21 E.); on the southwest by the utility line road right of way; and on the west by State Route S-34.

The boundaries include approximately eight scattered sections of non-public land, which account for approximately 9 percent of the land area. A small area along the northern edge of the Wilderness Study Area is in a Water and Power Resources Service withdrawal.

This WSA is 65 percent hills and 35 percent highly dissected alluvial fans.

WILDERNESS QUALITY

Description of Environment

The borders of the area encompass a wide variety of topography. In the southern section, the rugged Cargo Muchacho Mountains dominate the scene. Volcanic rocks, deep canyons, twisting washes, mixed with more typical flat desert areas, present an impressive picture. In the north, the terrain changes into low, rolling hills and then back into the jagged and coarse area around Picacho Peak, a local landmark. Plant cover varies considerably throughout the area. In the Cargo Muchacho Mountains and Picacho Peak area, vegetation is sparse to nonexistent. Washes provide the primary green areas in the southern and central areas. Nearing the Colorado River, plant life increases dramatically; mesquite, catclaw, smoke trees, and a wide variety of low desert shrubs and grasses can be found.

Natural Condition

The naturalness of the area has suffered considerably from past activities of man. The Cargo Muchacho Mountains are laced with roads and ways, mining scars, equipment, and debris. The signs of man's activities extend far up the area to the base of Picacho Peak. The northern portion of the area has been excluded because of a Water and Power Resources Service withdrawal. Private land holdings in the central portion are abundant. The remaining

[1]Portions of T. 13 S., Rs. 21 and 22 E., SBM.

area, which is located between Gatuna Wash and Gavilan Wash and adjoins the Picacho State Recreation area, is pristine. A small mining area near the northern portion of the area has been excluded.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Many outstanding opportunities for solitude exist within the remaining area. The rugged terrain provides numerous spaces where solitude can be attained. Topographic and vegetative screening combine to insure isolation. The variety of terrain provides outstanding opportunities for primitive and unrestricted types of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 27 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

This WSA is located between Indian Pass and Carrizo Wash. This area has very good potential for copper and may also contain uranium or clay mineralization.

Two copper occurrences are shown within this area on a map accompanying California Department of Mines and Geology, County Report 7. This is in the southeastern extension of a belt of copper-bearing rocks. Dioritic intrusions and aplite dikes cutting metasediments of the McCoy Formation are the host and geologic environment in which these deposits occur. Uranium and clay are found in hydrothermal alteration zones in Orocopia schist. A large body of this rock type forms the central and western parts of this WSA. Further work is needed to discover alternation zones within this area which would be likely to contain these minerals. Both copper and uranium are strategic minerals.

There are at least 13 unpatented mining claims within this WSA.

Vegetation

No unusual plant assemblages occur within WSA 355A. Vegetation consists mostly of creosote bush scrub and desert microphyll woodland. One sensitive plant species (Ditaxis californica) is known to occur within this WSA.

Wildlife

All of this WSA is permanent range of the desert bighorn sheep (Quartz Peak/Vinegre Wash herd); about 95 sheep are present here. Approximately 5 percent of this herd's range is within the WSA. About 3 square miles of prairie falcon foraging area and 7 square miles of the Quartz Peak/Picacho

mule deer concentration area are included within the WSA. About 3 percent of the range of this herd of approximately 200 deer is within the WSA.

Cultural Resources

Three and a half square miles of known high sensitivity are located in this WSA.

Native American Uses, Needs, and Sites

This Wilderness Study Area is associated with the collection of hawk, eagle, and owl feathers. The area also represents the former territory of the Quechan Coyote clan.

Scenic Quality

Although it does not include Picacho Peak, the area displays an over-all rugged, rocky appearance. Colors are reds and blacks and volcanic in nature. Vegetation is scattered and is generally limited to creosote and occasional cholla and ocotillo. In the washes, larger varieties of vegetation can be found. Vegetation density increases in the eastern portions approaching the Colorado River. High ratings for landform, color, and uniqueness reflect the character of the area.

General Recreation

This entire WSA is within a larger hunting area which has been rated as excellent for deer, quail, and rabbit hunting opportunities.

Good rockhounding opportunities for moss agate, jasp-agate, jasper, pertrified palen wood, dumortierite, and golden jasper are known throughout this WSA.

This WSA is part of a larger designated Natural Environment Area.

Part of a concentrated recreational use zone overlaps into this WSA. The concentrated use zone received 15,482 recreational visitor use days in 1978. Primary recreational activities include camping, four wheel drive touring and access, motorcycle play and touring, rockhounding, and hunting.

Range Uses and Potential

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comments addressing inventory considerations were evenly divided on the status of natural condition. A few other comments were received concerning study phase considerations.

Study Phase

Few comments specifically addressed this WSA, since the area was created late in the inventory phase from the larger WSA 355. Letters on file for WSA 355 make some references to the area between Gatuna Wash and Gavilian Wash, the area considered here. Some concerns were expressed about vehicle access in this area. Carrizo Wash provided Colorado River and Pichacho State Park access from the south. Family recreationists, including rockhounds, enjoy driving through and exploring this area. Potential for copper, perlite, and gold mining may exist, because of the evidence of past mines. Geothermal potential may exist in the area. This area contains part of an illegal alien trail, and it was recommended that vehicle access for patrol be maintained.

The area's pristine nature deserves wilderness protection, according to some. The wash system permits the penetration of several Colorado River species of wildlife. These washes are scenic and isolated and provide excellent opportunities for solitude. Cultural resources, such as the historic inactive placer mines, are here.

Some comments were received in response to the workbook. One comment was received encouraging wilderness classification and expansion of the area. Another comment opposed the wilderness because this is a favorite rockhounding area and there is not enough access.

Draft Plan Alternatives

Several public comments specific to WSA 355A were received in response to the Draft Desert Plan Alternatives. One comment agreed with the protection alternative. Other comments agreed with the Balanced Alternative. One comment agreed with the Use Alternative. Another comment wanted more wilderness than was recommended in the Protection Alternative. General comments include the recommendation to retain existing vehicle access routes.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Picacho Peak Wilderness Study Area (355A) is recommended as suitable for wilderness designation.

This relatively small WSA was ranked 27 in relative wilderness qualities. The area is part of a larger recreation-use area that supports both motorized and nonmotorized activities. Four-wheel-drive and motorcycle play and touring are prime uses of the over-all area. Although it was recognized that wilderness designation would conflict with this and with geology, energy, and mineral potential, it was determined that the area's wilderness values were more significant than its competing resources values. This designation would enhance the natural values in the area, which include a small herd of bighorn sheep and one sensitive plant species.

IMPACT OF PROPOSED PLAN

Since the study area is recommended for Class C, the highly rated wilderness values would benefit.

WILDERNESS STUDY AREA 356

Little Picacho Peak

GENERAL DESCRIPTION

The area (39,600 acres)[1] is located in the southeastern corner of California north of Yuma, Arizona. Roughly rectangular in shape, the area is bordered on the west by a graded road and on the east by a combination of the California Desert Conservation Area border and a graded road. In the southeastern corner the boundary is a ridgeline. The northern border is formed by the Picacho State Recreation Area, and the southern edge is bounded by a line just north of the All-American Canal.

There are 3-3/4 sections of State-owned lands within the study area. A portion of the lower township is withdrawn by Secretarial Order of August 26, 1902, for the benefit of the Yuma Reclamation Project. In addition, there are a number of recorded mining claims in the western and south-central portions. This WSA contains 65 percent hills, 20 percent dissected fans, 13 percent highly dissected fans, and 2 percent pediments. Most soils in this WSA are highly sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

This area includes a variety of terrain. Within its 260 square miles, flat meadow-like areas, low rolling hills, table-top mountains, rough and jagged peaks jutting up from the desert floor, deep canyons, and washes are all an integral part of the area. The surrounding river, canals, and lakes provide support for an abundance of vegetation not normally found in the desert. Tall, dense smoke trees, palo verde, and mesquite grow near the water and in the washes thinning out rapidly near the center of the area, where the more typical ocotillo, creosote, and cholla dominate the flatlands. Vegetation in the washes is lush and forms long lines of green. When contrasted against the rock and sand surfaces, this tends to visually divide the area.

Natural Condition

Within the area, the majority of the land has retained its primeval character and influence. Mining activity, claims, and mining roads have been excluded from the western, southern, and eastern borders.

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[1]Portions of T. 13 S., R. 22 and 23 E., 14 1/2 S., R. 22 E.; T. 14 S., 22 and 23 E.; and T. 15 S., R. 22, 23, and 24 E., SBM.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The complex landforms, which change rapidly between areas, provide the natural barriers necessary to separate the entire area into isolated spaces. Vegetation reinforces the topography to ensure the screening necessary to provide outstanding opportunities for solitude. The area is large enough and diverse enough to provide outstanding opportunities for a primitive and unconfined type of recreation.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 12 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

The area includes many mineral deposits. Gold, silver, and lead have been produced from mines in the northern part of the WSA. With increased metal prices, there is renewed interest in these deposits, and exploration can be expected. There are several copper occurrences in the Copper Basin, west of Marcus Wash, and copper minerals were also found south of Senator Wash during field work. The copper mineralization here, as in other parts of the Picacho State Recreation Area is in altered dioritic intrusions near rocks mapped as McCoy Mountains Formation (metasediments and metavolcanics). None of these deposits have been drilled, which would provide the best indications of economic potential. Silver, lead, and copper are all strategic commodities.

There are over 100 unpatented mining claims within the WSA. Much of the southern part of the WSA has been disturbed by quarrying for the Water and Power Resources Service.

Vegetation

No unusual plant assemblages occur within WSA 356. Vegetation consists mostly of creosote bush scrub and desert microphyll woodland. No sensitive or significant plant species are known to occur within this WSA,

Wildlife

The Picacho Peak bighorn sheep herd, numbering approximately 25 individuals, occurs within WSA 356. This includes 3 square miles (25%) of concentration range, 6 square miles (65%) of permanent range, and 35 square miles (95%) of seasonal range. Seventy percent of the herd's total range is included here.

Cultural Resources

No areas of known cultural resource sensitivity/significance are known in this region. However, the area has not been systematically surveyed. The

surrounding area has an extremely high density of sites, and the same can be predicted for this vicinity.

Native American Uses, Needs, and Sites

Little Picacho Peak in the northeastern corner of the WSA and the ridge of the Chocolate Mountains in the southwestern section are currently used as ritually associated collection areas by the Quechan, Cocopa, and occasionally the Mohave. This area is of mythological significance to the elders of several Native American groups. A Quechan habitation site is known to exist in the extreme northwestern portion of the WSA.

Scenic Quality

The northern portion of the area includes Little Picacho Peak, which is a part of a unique visual formation. The rugged, colorful landform and rare scenery rated the highest possible scores. The surrounding area is basically flat with many washes of all sizes and shapes. The central portion contains areas displaying highly eroded hills and canyons which, at times, reflect a "moonscape" appearance. Color variation is extreme and is provided by exposed surface colors. Vegetation is generally sparse with scattered patches of creosote and mixed desert shrubs. Isolated areas of ocotillo and, generally in the washes, stands of smoke trees can be found.

General Recreation

Cliffs, buttresses, and volcanic plugs are prominent land marks and very colorful landforms. These peaks have been rated "medium" for their interpretive values. Three other interpretive sites exist within this WSA, but as yet have not been rated.

The entire area is rated excellent for deer, quail, and rabbit hunting.

A fair rockhounding site for chalcedony roses, black agate, calcite nodules, geodes, and opalite exists within this WSA. A portion of this WSA is designated as a Natural Environment Area.

Along the western border of the Picacho WSA exists a linear concentrated recreational use zone. During 1978 over 28,000 recreational visitor use days were recorded in this zone. Primary activities include sightseeing, painting and photography, rockhounding, shooting, and hiking.

Range Uses and Potential

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Many comments were received on this area. Most that were relevant to the inventory pointed out areas where motorized vehicle use, rockhounding, and mining took place. Some additional roads were also identified. A field evaluation has led to some changes that excluded additional areas which do not meet wilderness criteria.

Study Phase

Sixty letters about WSA 356 were received during the inventory phase; a majority were concerned about access for recreation and other multiple-use concerns. An adjustment in the eastern boundary of the area, showing Generator Wash road, and in the southern portion of the roadless area occurred during inventory evaluation, and several of the study phase comments were about access in these areas. Senator Wash was valued by family recreationists, including several rockhounding families representing both Imperial County and Yuma residents. There was also concern about a large winter-vacation population which winters near here. The area is rugged but accessible in vehicles. Families enjoy sightseeing, pleasure driving, four-wheel driving, nature study, picnicking and other activities in the area; little threat to natural vegetation occurs from these vehicles according to the commenters. Lack of water makes extended hiking impossible. Vegetation is sparse, and wildlife is typical, according to one.

Geothermal energy, oil, and gas potential exists in the area and should be considered before wilderness designation occurs. Provisions must be made for an east-west utility corridor for San Diego Gas and Electric Company's power transmission line. The geology and past mining of the area indicate mineralization, gold, copper, and silver. Sight-and-sound intrusions include: motorized vehicles, aircraft, All-American Canal and activities along the canal, mining operations, Imperial Gabler Road, and Indian Pass Road. A 1-mile strip above the canal for access and future facilities is urged. Sites for quarrying operations for the Water and Power Resources Service is also a concern.

According to other commenters, wilderness designation is warranted by the area's high scenic and geologic value and by its position as one of the 10 river-related wilderness candidates in the desert. Wildlife values are high, with Colorado River species living in the wash system of the area. Three water holes for wildlife are in the area. Extensive archaeological evidence exists and should be protected. Commenters recommended accommodation for vehicle access, particularly in the south and east, while preserving the remainder for wilderness-related recreational opportunities such as nature study, rockclimbing, hiking, and sightseeing. The damage caused by vehicles to vegetation, wildlife, and soils was discussed in some comments.

Some comments were received in response to the workbook. Some were opposed to wilderness classification because Imperial County has solid waste and

gravel sites in the area and the area is a favorite rockhounding area that needs access. One comment was received in favor of wilderness because the imprint of man will disappear from the area in time.

Draft Plan Alternatives

Several public comments specific to WSA 356 were received in response to the Draft Desert Plan Alternatives. One agreed with the Protection Alternative, while another favored the Balanced Alternative. Other commenters wanted more wilderness than was recommended in the Protection Alternative. General comments included a recommendation to retain existing vehicle access routes.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Little Picacho Peak Wilderness Study Area (356) is recommended as nonsuitable for wilderness designation.

The area has a history of mining and mineral exploration. Mineral occurrences have been found throughout the area. The area borders a very heavily used recreation area, and the WSA itself is popular for many motorized and nonmotorized recreation activities.

Although the WSA was ranked very high in relative wilderness values, it did not possess any of the qualities identified as desert-wide wilderness opportunities. It was decided that the highest and best use of this WSA was for geology, energy, minerals, and recreation activities. The area was recommended for Class L (approximately 90%) and Class M (approximately 10%). The Class M designation in the southeastern corner of the area is to provide access for mineral development and more intense motorized recreation. The Class L designation will provide limited access while protecting the bighorn sheep population and its habitat and the Native American resource values.

IMPACT OF PROPOSED PLAN

The major part of the study area is recommended as Class L. The fairly restrictive land use associated with this designation would result in only a slightly adverse impact on wilderness values. Impacts resulting from mineral exploration and development would be localized in this geologically diverse area and would therefore not significantly impair the wilderness values.

A small portion of the area in the southeastern corner is recommended for Class M. Many uses allowed under these guidelines would negatively impact wilderness values, although the impact would not be significant over the entire WSA.

WILDERNESS STUDY AREA 360

North Algodones Dunes

GENERAL DESCRIPTION

This elongate, triangular-shaped roadless area (21,300 acres)[1] is bounded on the northeast by a combination of the Southern Pacific Railroad and the Midland-Glamis Road; to the south by State Route 78; and to the west by a combination of the new, bulldozed route of the Coachella Canal and the old Coachella Canal and access road. The area contains approximately 1,000 acres of non-public land. The entire area is within a reclamation withdrawal under Secretarial Order of June 4, 1930. This WSA is 95 percent sand dunes, 4 percent alluvial fans, and 1 percent sand-covered plains.

WILDERNESS QUALITY

Description of Environment

This area is characterized by large dunes as well as small, mesquite-covered dune masses. The southern half is a National Natural Landmark and an area which BLM closed to motorized vehicle activity to protect critical habitats for plant species which are endemic to the Imperial Sand Dunes and which have been proposed for listing as threatened and endangered.

Natural Condition

The portion of the area which retains its primeval character and influence and generally appears to be affected primarily by natural forces of nature is that part presently recognized as a National Natural Landmark and is closed to motorized vehicle use. In addition, this area contains only two sections of private land. The area to the north of this landmark boundary has been excluded from wilderness consideration because of man's disturbances. It includes Mammoth Wash, which is heavily used by motorized vehicles and which has reduced natural vegetative cover. The area around Glamis has also been excluded because of buildings, roads, and vehicle scars.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The complexity of the dune system, as well as natural screening of visitors from one another by terrain and thick stands of mesquite vegetation, provides outstanding opportunities for solitude or a primitive and unconfined type of recreation. Because of the unique natural qualities and the natural condition of the southern portion, freedom of movement is impeded.

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[1]Portions of T. 12 S., Rs. 16 and 17 E.; T. 13 S., Rs. 16, 17, and 18 E., SBM.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 19 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has known very high potential for geothermal resources, with numerous lease applications, and possible potential for oil and gas. No claims are recorded.

The geothermal potential of the East Mesa-Glamis Dunes area is excellent for both high temperature (electrical power generation) and low temperature applications. Table 1 shows the geothermal characteristics of the central and eastern Imperial Valley.

The East Mesa Known Geothermal Resource Area (KGRA) currently has one 13.5 MWe binary powerplant in operation and a 64 MWe (gross) unit approved for construction and operation.

The Dunes KGRA was drilled in 1973 by the Los Angeles Department of Water Resources (DWR) to a total depth of 2,016 feet (location was Sec. 33, T. 15 S., R. 19 E.). Bedrock was encountered at 300 feet below surface and the rest of the well was drilled through hydrothermally sealed sandstone and shales. They were sealed with silica.

Table III-2-1

GEOTHERMAL CHARACTERISTICS OF THE CENTRAL AND EASTERN IMPERIAL VALLEY

KGRA or (Prospect)	Temperature[1] Gradient (°F/100')	Reservoir[2] Temperature in °F	Reservoir[2] Volume in Cubic Miles	Power[2] Rating in MWe
Salton Sea	7-19	620	28.3	3400
Brawley	4-18	490	8.3	640
Heber	7-12	350	17.3	650
East Mesa	6-10	330	8.8	360
Dunes	7-27	295[3]	2.2[3]	?
Glamis - East	3-12	295[3]	0.8[3]	?
Glamis - West	3-12	295[3]	1.2[3]	?
(Westmoreland)	6-15	426	30.0	1710
(East Brawley)	4-6	?	?	?
(North East Mesa)	3-8	?	?	?

[1]Paul K. Morton: 1977. "Geology and Mineral Resources of Imperial County, California," California Division of Mines and Geology, County Report #7.

[2]"Assessment of Unites States Geothermal Resources - 1978," U.S. Geological Survey, Circular 790, 1979.

[3]Preliminary estimate.

Water temperatures encountered were 210°F at 600 feet, 218°F at 850 feet, and 200°F at 2,000 feet. The well was drilled at the extreme western edge of the anomaly and does not represent the true potential of the geothermal resources present. The presence of intensely silicified rocks indicates that a geothermal system has been in operation for long period of time (several 100,000 years).

The Glamis KGRA has been drilled for temperature gradient wells to depths of from 300 to 2,000 feet. The one 2,000-foot well intersected granitic gneisses at 600 feet in the vicinity of Glamis store.

A temperature gradient well located in Section 34, T. 14 S., R. 19 E., intersected volcanic rocks at 472 feet down the well and an intrusive dike at 565 feet. Its gradient was 10°F per 100 feet.

The North East Mesa area (along State Route 78 between the East Highline and Coachella Canals) has had several wells drilled to a depth of 500 feet without intersecting bedrock. Temperature gradients range from 3° to 8°F per 100 feet. The U.S. Geological Survey is currently evaluating the East Mesa area along and north of State Route 78 to determine if the area should be classified as a KGRA (Charles Brooks, pers. comm., April 1980).

Two wells drilled east of the sand dunes (one at Sec. 34, T. 14 S., R. 15 E., and Sec. 27, T. 13 S., R. 18 E.) intersected bedrock at 200 feet below sea level. A well drilled in Section 33, T. 15 S., R. 19 E., intersected bedrock at 140 feet below sea level. Reservoirs in this rock will be controlled by fractures and faulting. The potential for a hot, dry rock resource and possible fracture-controlled steam areas is considered good.

West of the Coachella Canal (west of the San Andreas Fault), wells in the East Mesa KGRA have been drilled to 11,000 feet without intersecting bedrock. All wells completed were in the unconsolidated sediments of the Colorado River Delta. Large volumes of water are present in these sediments and liquid-dominated resources have been demonstrated to exist. The San Andreas appears to be a boundary zone for the Imperial Valley, both geologically and geothermally.

East of the fault, bedrock is at approximately 200 feet below sea level and will contain either hot, dry rock resources or localized fracture-controlled steam or hot-water resources.

West of the fault, bedrock is at an approximate depth of 15,000 to 20,000 feet, based on seismic, resistivity, and gravity surveys. The valley is filled in with middle Tertiary marine sediments and late Tertiary to recent continental sediments of the Colorado River Delta. Because of the saturation and very high permeability and porosity of these sediments, the geothermal resources are liquid-dominated and controlled by the intersection of major faults with a suitable sandstone/siltstone horizon to act as a reservoir.

Vegetation

The Algodones Dunes system is one of the largest in the Southwest. It and its vegetation are considered to be an unusual plant assemblage.

The species listed in Table 2, below, are the plants in WSA 360 which are considered to be very rare, threatened, or endangered by the California Native Plant Society (CNPS), the U.S. Fish and Wildlife Service (FWS), and the California Department of Fish and Game (CDF&G). The plants are protected by current Bureau of Land Management Policy.

Table III-2-2

RARE, THREATENED, OR ENDANGERED SPECIES OF THE NORTHERN ALGODONES DUNES

Species	FWS	CDF&G	CNPS
Ammobroma sonorae	T	-	VRE
Astragalus magdalenae var. piersonii	T	E	VRE
Croton wigginsii	-	E	VRE
Eriogonum deserticola	-	-	VRE*
Lelianthus niveus ssp. tephrotes	T	E	VRE
Palafoxia arida ssp. gigantea	-	-	VRE

*Not rare, threatened, or endangered, according to BLM data.

Wildlife

This WSA contains habitat for the flat-tailed horned lizard, which is federally listed as threatened. Most of the area, approximately 30 square miles, is also habitat for the Andrew's dune scarab beetle, which is also undergoing status review. This is equivalent to 12 percent of the species' total range. The Couch's spadefoot toad occurs at three sites, comprising 38 square miles and 15 percent of the species' total range, and the Colorado Desert fringe-toed lizard is found scattered throughout the area.

Cultural Resources

No areas of cultural resource sensitivity/significance are known in this area. No sites are recorded in this area, and few are expected.

Native American Uses, Needs, and Sites

This WSA is a part of traditional hunting/collecting areas of the Kamia. In addition, there is recorded mythological association for the Kamia, Southern Diegueno, Yuma, and Maricopa. The Xakwinimis trading route runs adjacent to the southern border of the WSA. Similarly, the southern portion is known to the Quechan as Yichut and is held to be sacred by many contemporary reservation residents. Cremation sites have been identified in the ethnographic literature (woods, 1980) and are distributed throughout the southern portion.

Scenic Quality

The area includes the northern part of the Algodones Dunes, north of State Route 78. The west side of the WSA, which includes the dune area, possesses high scenic values and received very high ratings for landform, color, and uniqueness. Also noted was the general absence of intrusions. The eastern side, in contrast, is flat and cut by many shallow washes. Vegetation is thicker and more diverse. The number and scope of the impacts are considerably greater on the eastern part.

General Recreation

One teaching and research area which is used eight or more times a year is located at the very southeast corner of this WSA. Pre-college and university classes use the site.

Because these dunes have endemic plant and animal species, they have been designated as a motorized vehicle closed area in the ICMP. They have also been identified as an Outstanding Natural Area.

Range Uses and Potential

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

A majority of the comments addressing the inventory factors agreed with the present status of the area's boundaries or felt they should be expanded. Other comments said the area had roads that had not been included or that the works of man were evident. The area has been reevaluated, and changes have been made where appropriate. Many of the comments received dealt entirely with study phase factors.

Study Phase

The unique nature of the Algodones Dunes generated more comments than any other WSA in the desert, over 400 for both WSA 360 and WSA 362, with many letters referring to both areas. Many letters came from organized groups

concerned about the dunes, and the number of letters received includes several copies of a single letter signed by separate individuals.

About 215 comments were received about WSA 360, with a heavy majority favoring a multiple-use designation for the area. The area's highest value, according to many, is as a recreation area. For many it is the best motorized vehicle area in the desert, along with WSA 362. The values of family recreation are described in several letters: old, young, and handicapped persons can enjoy the scenic and natural values of this area only in vehicles; children learn driving skills, nature skills, and family responsibility and, besides strengthening family ties, these activities give youth the outlet for energies that may otherwise be used in ways destructive to themselves or others. Not only do these values far outweigh those of protection of an unimportant species of dune insects and vegetation, the activity of vehicles has little or no effect on these species, many argue. The vitality of wildlife and vegetation is a function of moisture, not motorized vehicles use; vehicles actually aid in the transportation of seeds throughout the dunes. Only designated rare and endangered species should be protected, not those proposed for the Federal lists, it was suggested. The presence of these species in the area has been exploited by groups biased against motorized vehicles. Hiking is too difficult in the dunes area.

The northern section, already closed to vehicle access, should be at least partly reopened -- a previous north-south corridor should be reinstituted, several suggested. One comment said that only the middle half of the area has true wilderness qualities.

Besides the economic impacts on Imperial County, the constriction of motorized vehicle use may result in heavy use in other, more sensitive areas and overcrowding in the dunes areas. Area 360 contains the Dunes KGRA, which may result in important energy generation and beneficial spinoff effects for Imperial County, particularly in food processing.

Sight-and-sound intrusions in this area include: the railroad on the eastern border; military activities, including bombing noise and low-flying aircraft; traffic on State Route 78; the Coachella Canal; and the visibility of farms and other human activity in Imperial Valley. Deletion of the entire area, or boundary adjustments to the WSA are recommended.

The unique and fragile nature of the dunes system and its wildlife and vegetation are discussed by supporters of wilderness designation. Several described extensively their knowledge of the damaging effects of vehicles on dune flora and fauna. These arguments and lists of species identified are described more thoroughly in the narrative of WSA 362, to which most of these comments were specifically directed, although they apply to the entire dunes area.

The protection of this complex ecosystem requires, several believed, management of the entire dunes system, and the East Mesa areas of WSA 361 and WSA 367 as a single wilderness unit. For this purpose, expansion of WSA 360 north to Mammoth Wash was urged.

Comments were received in response to the workbook. Some comments favored wilderness classification to protect rare/endangered species and natural values. Others opposed wilderness classification because the area borders the Chocolate Mountains Gunnery Range, and this is no place for primitive and unconfined recreation.

Draft Plan Alternatives

A variety of public comments specific to WSA 360 was received in response to the Draft Desert Plan Alternatives. For example, one indicated complete agreement with the Protection Alternative, another concurred with the Balanced Alternative's recommendations, while a third was in agreement with the Use Alternative. It was requested that the Balanced Alternative recommend more acreage as suitable. Some noted that rare and endangered plant and animal species resided within the study area. More details were requested on what criteria were used for reducing the size of the Wilderness Study Area. In addition, one stated that the exploration for and development of oil, gas, and geothermal resources under the No Action Alternatve were the best uses of the Wilderness Study Area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The North Algodones Dunes Wilderness Study Area (360) is recommended as suitable for wilderness designation.

The over-all quality of this WSA is reflected in its high ranking. This was a prime consideration in the determination that wilderness designation was the highest and best use of thisarea. Although it was acknowledged that conflicts existed because of its known geothermal potential, it was determined that its values as wilderness exceeded its value for development.

Along with this determination, it was decided to expand the northern border of the WSA to include the Mammoth Wash area. This designation would conflict with current use, which is primarily vehicle-oriented recreation, but it was necessary for management of the area for wilderness.

IMPACT OF PROPOSED PLAN

The study area is recommended for Class C, and the southwestern boundary has been expanded. This creates a more manageable boundary and a "buffer" area along the WSA. This designation results in a positive impact on wilderness values, which rated outstanding (the area was ranked 19 out of 137).

WILDERNESS STUDY AREA 362

South Algodones Dunes

GENERAL DESCRIPTION

The northern boundary of this area (47,400 acres)[1] parallels State Route 78. The western boundary is a combination of the Coachella Canal and access road and the new, bulldozed, Coachella Canal route. The southern boundary is a combination of the All-American Canal and Interstate 8. The eastern boundary is the Southern Pacific Railroad.

The corrected boundaries of the study area includes 6 1/2 scattered sections of non-public land. The area is completely within several Water and Power Resources Service withdrawals. Approximately one-fourth of the northern portion is possibly contaminated by unexploded military ordnance, a remnant from World War II military maneuvers.

This WSA is 90 percent sand dunes and 10 percent alluvial fans.

WILDERNESS QUALITY

Description of Environment

This area consists primarily of the Algodones Dunes System, which is one of the largest dune masses in the United States. The northern portion of this roadless area includes steep, sandy slopes, while the central portion includes more gently rolling dune masses with thickets of mesquite and palo verde. The steeper western flanks drop rapidly to creosote bush scrub flats. Several plant species found in this area have been proposed for Federal listing as "endangered." In addition, the U.S. Fish and Wildlife Service has proposed "endangered" listing for the Andrew's dune scarab beetle.

Natural Condition

The large central portion of the Algodones Dunes System is affected primarily by natural forces and is an area where the earth and its community of life are undisturbed by man. The northern portion includes the Gecko Campground and Osborne County Park near Competition Hill. Motorized vehicle activity has severely reduced much of the natural vegetative cover and has compacted the northern sand mass. Similarly, use in the southern portion of the Algodones Dunes by motorized vehicle activity has resulted in man's imprint being substantially noticeable. These areas, as well as those along the eastern and western borders for the same reasons, have been determined not to

[1]Portions of Ts. 14, 15, and 16 S., Rs. 18, 19, and 20 E., SBM.

contain wilderness values and have been excluded from wilderness consideration.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Due to the extremely hilly and varied shape and size of the dune systems, as well as thick stands of mesquite and creosote vegetation, this area contains outstanding opportunities for solitude or a primitive and unconfined type of recreation. The area's topography, accentuated by changing patterns of light, shadow, and color, tend to enhance feelings of vastness and solitude. Opportunities for nature study are extremely high because of the unique plant and animal populations which are found within this area.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 40 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has very high known potential for geothermal resources and numerous lease applications and potential for oil and gas.

The geothermal potential of the East Mesa-Glamis Dunes area is considered to be excellent for both high temperature (electrical power generation) and low temperature applications.

The East Mesa KGRA currently has one 13.5 MWe binary power plant in operation and a 64 MWe (gross) unit approved for construction and operation.

The Dunes KGRA was drilled in 1973 by DWR to a total depth of 2,016 feet (location was Sec. 33, T. 15 S., R. 19 E.). Bedrock was encountered at 300 feet below surface, and the rest of the well was drilled through hydrothermally sealed sandstone and shales. They were sealed with silica. Water temperatures encountered were 210° F at 600 feet, 218° F at 850 feet, and 200° F at 2,000 feet. The well was drilled at the extreme western edge of the anomaly and does not represent the true potential of the geothermal resources present. The presence of intensely silicified rocks indicates that a geothermal system has been in operation for a long period of time (several 100,000 years).

The Glamis KGRA has been drilled for temperature gradient wells to depths of from 300 to 2,000 feet. The one 2,000-foot well intersected granitic gneisses at 600 feet in the vicinity of the Glamis store.

A temperature gradient well located in Section 34, T. 14 S., R. 19 E., intersected volcanic rocks at 472 feet down the well and an intrusive dike at 565 feet. Its gradient was 10° F per 100 feet.

The North East Mesa area (along State Route 78 between the East Highline and Coachella Canals) has had several wells drilled to a depth of 500 feet without intersecting bedrock. Temperature gradients range from 3 to 8° F per 100 feet. The U.S. Geological Survey is currently evaluating the East Mesa area along and north of State Route 78 to determine if the area should be classified as a KGRA (Charles Brooks, pers. comm., April 1980). Two wells drilled east of the sand dunes (one at Sec. 34, T. 14 S., R. 15 E., and Sec. 27, T. 13 S., R. 18 E.) intersected bedrock at 200 feet below sea level. A well drilled in Section 33, T. 15 S., R. 19 E., intersected bedrock at 140 feet below sea level. This indicates that east of the Coachella Canal (the approximate location of the San Andreas Fault) the desert sediments are a thin veneer and bedrock of various lithologies is close to the surface. The potential for a hot, dry rock resource and possible fracture-controlled steam areas is considered good.

West of the Coachella Canal (west of the San Andreas Fault), wells in the East Mesa KGRA have been drilled to 11,000 feet without intersecting bedrock. All wells completed were in the unconsolidated sediments of the Colorado River Delta. Large volumes of water are present in these sediments and liquid-dominated resources have been demonstrated to exist. The San Andreas appears to be a boundary zone for the Imperial Valley, both geologically and geothermally.

East of the fault, bedrock is at approximately 200 feet below sea level and will contain either hot, dry rock resources or localized fracture-controlled steam or hot-water resources.

West of the fault, bedrock is at an approximate depth of 15,000 to 20,000 feet, based on seismic, resistivity, and gravity surveys. The valley is filled in with middle Tertiary marine sediments and late Tertiary to recent continental sediments of the Colorado River Delta. Because of the saturation and very high permeability and porosity of these sediments, the geothermal resources are liquid-dominated and controlled by the intersection of major faults with a suitable sandstone/siltstone horizon to act as a reservoir.

Vegetation

The Algodones Dunes system is one of the largest in the Southwest. It and the vegetation it supports have been identified as an unusual plant assemblage (UPA).

The species listed in the table below are the plants in WSA 362 which are considered to be very rare, threatened, or endangered by the California

Native Plant Society (CNPS), the U.S. Fish and Wildlife Service (FWS), and the California Department of Fish and Game (CDF&G). The plants are protected by Bureau of Land Management policy.

Table III-2-3
PROTECTED PLANTS OF WSA 362

SPECIES	FWS	CSF&G	CNPS
Ammobroma sonorae	T	-	VRE
Astragalus lontiginosus var. borregamus	-	-	VRE
Astragalus magdalenae var. piersonii	T	E	VRE
Croton wigginsii	-	E	VRE
Eriogonum deserticola	-	-	VRE*
Helianthus niveus ssp. tephrotes	T	E	VRE
Palofoxia arida ssp. gigantea	-	-	VRE

*Not rare, threatened, or endangered, according to BLM data.

Wildlife

All of this area is habitat for the flat-tailed horned lizard (undergoing status review for Federal listing) and the Andrew's dune scarab beetle. The Colorado Desert fringe-toed lizard also occurs throughout the area. Significant portions of both the flat-tailed horned lizard range (5%) and Andrew's dune scarab beetle range (20 percent) are present here. The WSA also encompasses 15 percent of the Algodones Dune system.

Cultural Resources

No areas of cultural resource sensitivity/significance are known to occur in this WSA. No sites are recorded in this area, and few are expected. The basin areas of the sand dunes are likely to have sherd scatters indicative of temporary encampments or through passage.

Native American Uses, Needs, and Sites

This WSA represents traditional hunting/collecting areas of the Kamia. In addition, there is recorded mythological association for the Kamia, Southern Diegueno, Yuma, and Maricopa. The Xakwinimis trading route runs adjacent to the southern border of the WSA. Similarly, the southern border is known to the Quechan as Yichut and is held to be sacred by many contemporary reservation residents. Cremation sites have been identified in the ethnographic literature (Woods, 1980) and are distributed throughout the southern portion.

Scenic Quality

The area includes portions of the Algodones Dunes south of State Route 78. It consists of smooth, rounded slopes, sharp, curving ridgelines, and steep slip faces. The area displays an outstanding example of varied landform, which is one of the primary factors in evaluating scenic quality. This, in addition to its uniqueness and lack of permanent intrusions, contributes to its "high" scenic quality rating.

General Recreation

The Algodones Dunes are the largest and best developed sand dunes system in the California Desert and contain considerable biological interest as well. The Algodones Dunes are rated "high" for their interpretive value. Little Valley is also within this WSA and is rated "low" for its interpretive values. Only one teaching and research site, which is used eight or more times annually by pre-college, college, or university classes, is located within this WSA.

This is a major dune system and the public has expressed concern for these features. This area is part of a larger Natural Environment Area.

Portions of two concentrated use zones exist within this WSA. Over 45,000 recreational visitor use days were recorded in 1978 in these two areas. Primary recreational activities include camping; dunebuggy play, competition, and touring; motorcycle and four wheel drive play and touring; and hang gliding.

Range Uses and Potential

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

The majority of the comments addressing inventory criteria indicated approval for including the area for further study or expanding the present boundaries. Other comments felt that man's influence on the area was significant. Many

other comments spoke to study phase factors. Examples included potential for geothermal development, recreation use, and endangered species protection.

Study Phase

Of 199 comments received, 119 preferred a multiple-use designation for the area, primarily for motorized vehicle recreation. This area is the best motorized vehicle area in the desert for many, and absolutely essential since the closure of the dunes area north of State Route 78 to vehicle use. These closures have already resulted in overcrowding (estimates of as high as 125,000 on a long weekend were made), and further constriction of the area available would cause more accidents than already occur. Besides the values of friendly competition and family activities (see narrative for WSA 360), motorized vehicle clubs are the major force for clean-up operations in the dunes. They provide significant income to Imperial County and an essential recreational outlet for Los Angeles-San Diego and Yuma metropolitan visitors. The dunes provide poor primitive recreational opportunities: there is no water, it is difficult hiking in sand, there is no vegetative screening for solitude. The recreation values of the dune far outweigh the values of endemic species protection. Wilderness designation would serve only a small elite of extremely athletic hikers. The impacts on the dunes by vehicles is negligible, much less than in other desert areas, because of the effects of wind and weather. This is proved by the characterization of part of the area as "roadless," when vehicles use it often. Moisture, not vehicles, determines the vitality of endemic species. At any rate, if the dunes do contain rare and endangered species, which many dispute the existence or importance of, the northern section provides a more-than-adequate haven for them.

The economic contribution of motorized vehicle recreation is important to several Imperial County towns. Also important economically to the county and Nation is the Glamis and Dune KGRA, indicating strong geothermal resources needed for energy development. Sight-and-sound intrusions include: Coachella Canal, railroad, truck traffic on State Route 78, I-8, military activity, Imperial Valley farms; and motorized vehicles.

Several boundary adjustments were recommended. Many supporters of wilderness felt that the present boundaries of the 2(c) area were unmanageable and had ignored the 2(c) criteria areas around it. The poor management boundaries were a consideration by BLM to accommodate motorized vehicle interests and not a strict interpretation of wilderness inventory criteria. The most common recommendation was to use the canal, I-8, the railroad, and State Route 78 as western, southern, eastern, and northern boundaries, respectively, with several suggesting that the Gecko Campground area and Osborne County Park and the surrounding heavy-use area be excluded.

The unique environment of the Algodones Dunes was the strongest argument for wilderness, according to many writers. Among the many species existing here are: Eriogonum, desert sunflower, giant Spanish needle, Ammobroma sonorae, Wiggins croton, horned lizard, Colorado Desert sidewinder, banded desert gecko, scarab beetle, Ephedra trifarca, Hespericallis undulata, Oro banche

cooperi, western brush lizard, desert iguana, fringe-toed lizard, Astragalus lontiginosus, Palofoxia linearis, mesquite, and palo verde. Vehicle use has dramatic soil and hydrological effects which reduce the ability of these biota to survive in the delicate balance of a desert environment. This ecosystem is unique and irreplaceable, with species of rare and endangered plants and animals.

Some letters noted that primitive recreation opportunities were good, with the dunes providing solitude, scenic and stark vistas, and a variety of biota for study. Spring floral displays are outstanding.

The management of WSAs 360, 362, 361, 367 was often suggested to adequately protect this system.

Numerous comments were received in response to the workbook. The majority of the comments favored wilderness classification to protect the dunes, to protect the rare/endangered species, and to preclude motorized vehicle use of the dunes. Some comments were opposed to wilderness classification so that the dunes would remain open for motorized vehicle use.

Draft Plan Alternatives

A variety of public comments specific to WSA 360 was received in response to the Draft Desert Plan Alternatives. For example, one indicated complete agreement with the Protection Alternative, while a second concurred with the Use Alternative. Another called for more wilderness under the Protection Alternative. It was requested that the Balanced Alternative recommend more acreage as suitable for wilderness (for example, the entire study area and the lands outside the study area). Some noted that rare and endangered plant and animal species resided within the study area. More details were requested on what criteria were used for reducing the size of the proposed wilderness area. In addition, one comment stated that the exploration for and development of oil, gas, and geothermal resources under the No Action Alternative were the best uses of the Wilderness Study Area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The South Algodones Dones Wilderness Study Area (362) is recommended as nonsuitable for wilderness designation.

Although ranking relatively high, the area did not meet any desert-wide wilderness criteria.

The area has a very high known potential for geothermal energy production and possible potential for oil and gas. In addition, the area supports vehicular recreation activities. These considerations were primary in determining that the value of the area for wilderness was not as significant as its value as a geologic, energy, and mineral and recreation resource.

It was recommended that the area be designated Class L. It was felt that this classification would protect the "Very Rare and Threatened or Endangered

Plant Species" currently protected by Bureau of Land Management policy and the other natural resources located within the area. Limited access provided by this classification would provide for mineral exploration and recreational vehicle use.

IMPACT OF PROPOSED PLAN

The study area is recommended for Class L. Use of the area in accordance with Class L guidelines would have no significant impact on the wilderness values of the area.

WILDERNESS STUDY AREA 368

In-Ko-Pah Mountain

GENERAL DESCRIPTION

The northern boundary of this area (29,700 acres)[1] is a portion of Interstate 8 and State Route 98. The western border is the California Desert Conservation Area boundary. To the south is the Mexico-California border. A U.S. Border Patrol drag road is also located along a portion of the southern boundary. The eastern boundary is a graded road.

The Wilderness Study Area contains a predominance of public lands with less than 6 percent non-public lands. The southern half of Section 32, T. 17 S., R. 9 E., was temporarily withdrawn on April 1, 1925, by Executive Order 4202 for classification purposes. This classification has never been removed. There are a number of recorded mining claims in the central and east-central portions of the study area. This WSA contains 70 percent hills, 20 percent sand-covered fans, 5 percent dissected fans, 3 percent pediments, and 2 percent alluvial fans.

WILDERNESS QUALITY

Description of Environment

The western portion of this area consists of the In-Ko-Pah Mountains which rise above the Yuha Basin and have impeded human travel and access for centuries. Landforms in the entire area range from the gently sloping, enclosed basin of Davies Valley to the steep-walled canyons and the pinnacles and spires of the higher summits. The area, also a portion of the roadless area, consists primarily of flat terrain dissected by Palo Verde Wash. The area includes palo verde and smoke trees in the washes and some crucifixion thorn around dry lake beds.

Natural Condition

Along the eastern border of the In-Ko-Pah Mountains, active sand and gravel operations have reduced and sharply altered the natural condition of the landscape. To the east, improved roads to repeater sites and mines similarly affect the natural character of the land. The Davies Valley Road, to prospects and mining claims, has been added through the center of the area. These portions, along with dwellings in the northern section, have been excluded from further wilderness consideration. The remainder of the roadless area is affected primarily by natural forces. The diverse

[1]Portions of Ts. 17 and 18 S. Rs. 9 and 10 E., SBM.

topography greatly reduces any impact from man's works, which include a few well-used primitive ways and some abandoned mining prospects.

The adjusted boundary generally follows that of the roadless area to the north and south while, to the east, it closely follows the base of the mountains and, to the west it follows Boulder Creek, some ridgetops, and the road to Smuggler's Cave and the Elliot mine.

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

Outstanding opportunities for solitude or a primitive and unconfined type of recreation are easily and readily available within the In-Ko-Pah Mountains. The rugged and diverse topography and terrain effectively screen visitors from one another. Numerous varieties of vegetation, including native palm groves, and the presence of bighorn sheep all add to the primitive experience.

WILDERNESS STUDY AREA RANKING

This WSA ranked 5 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has possible potential for metals, limestone, and other industrial minerals, geothermal energy, and oil and gas. About 10 unpatented claims are recorded.

Vegetation

Three unusual plant assemblages occur within this area -- the palm oasis at Mountain Springs, the blackbrush enclave on Mountain Springs Grade, and the Davies Valley agave-ocotillo community. Otherwise, the vegetation is comprised mostly of creosote bush scrub. Several sensitive plant species occur within WSA 368. These include Mimulus aridus, pilostyles thurberi, and Castela emoryi.

Wildlife

This WSA has 12 square miles of permanent Peninsular bighorn sheep range and 24 square miles of transient range, primarily in the Jacumba Mountains. This includes approximately 30 percent of the total range used by the Jacumba bighorn herd, estimated at 83 individuals. In addition, 35 square miles of magic gecko habitat and golden eagle and prairie falcon foraging areas are present. The flat-tailed horned lizard, currently under status review by the U.S. Fish and Wildlife Service, Office of Endangered Species, occurs on 10 square miles.

Mule deer concentrations occur in about 28 square miles of the area. Five springs are present in the western portion of the area. Unique vegetation includes the Smuggler's Cave southern chapparal (3 square miles) and In-Ko-Pa Primitive Area (30 square miles).

Cultural Resources

Essentially the entire western two thirds of this WSA falls in an area of very high cultural resources sensitivity. Hundreds of sites have been recorded.

Native American Uses, Needs, and Sites

Over 50 percent of this WSA represents an area of former habitation sites of Kamia clans. The Xakwinimis trading route runs along the northwestern edge of the WSA.

Scenic Quality

This WSA includes four polygons, three of which had high scenic values and one which had medium values. The over-all rating given to the area was "high." The area includes the southern Jacumba Mountains, Meyers Valley, and Davies Valley. These areas, because of diverse landform, outstanding displays of vegetation, and freedom from intrusions, provide unique visual experiences seldom found within the CDCA.

General Recreation

The Davies Valley is an isolated valley strewn with huge granite boulders and dotted with several palms. The Boundary Palms area in the In-Ko-Pah Mountains and Davies Valley are both rated as medium in interpretive values. Smuggler's Cave is another interpretive resource rate as "low" for its over-all interpretive values. No less than four additional interpretive areas are within this WSA and as yet have not been rated.

Only one teaching and research site exists within this WSA; it receives use on the average of once a year by a college or university class.

Good hunting for deer, quail, and chukar exists throughout this WSA. Red garnet can be found in one location rated fair for its rockhounding quality.

The entire WSA is an Outstanding Natural Area, with portions also designated as Primitive Area or Natural Environment Area.

Two concentrated use zones located in the very southwest corner of this WSA near the Mexican border accounted for less than 2,000 visitor use days of recreation in 1977. Primary activities in these areas included camping, picnicking, four wheel drive touring, hunting, motorcycling, sightseeing, and rockhounding.

Range Uses and Potential

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

Comment was evenly divided between those who favored wilderness designation based on wilderness and ecological values and those who felt the natural values had been impaired by the numerous vehicle routes. The area was field-checked again and additions and deletions have been made accordingly.

Study Phase

Area 360 generated 92 comments, with a slight majority favoring multiple-use designation for the area. Family recreation using vehicles for access was the most prevalent argument for multiple-use designation. Meyers Valley and Davies Valley in particular were cited as being too damaged by impacts and too popular as a camping area to be considered as wilderness. Bighorn sheep and petroglyphs can be viewed here and in other areas within the area. Rockhounding families say the area is the main garnet-collecting area in the southern desert. Rhyolite, pyrite, selenite, petrified wood, cryptocrystalline quartz, and spinel are among other gems and stones found here. Nature studies, photography, and picnicking are some of the activities frequently monitored. Pinto Canyon and Mountain Springs were areas noted for recreation areas requiring vehicle access. Geothermal, oil, and gas potential exists here, with possibly important spinoff benefits for Imperial County, such as use of the resources for food processing. The area is mineralized and may contain gold and other metallics. The area also has a proposed San Diego Gas and Electric utility corridor, which may be needed to transmit power from future geothermal power plants in Imperial County.

The protection of wilderness values on the southern border, adjacent to Mexico, would be unsupportable, and vehicle access is needed, some believe, for Government control of smugglers and illegal aliens. Sight-and-sound intrusions requiring deletion or boundary adjustment include: radio towers, I-8, State Route 98, Plaster City and Ocotillo, mining evidence, and aircraft.

The archaeological, geological, and ecological values of the area were also described by supporters of wilderness designation for this area. Among

plant species, mentioned are: K. grayi, Castela emoryi, Simmonsia chinensis, Mamillosia retramcistra, E. multiflora, Argemae corybosa, and Hoffmanseggia densiflora. A bighorn sheep habitat is here. Paleontological and archaeological values are extensive and warrant wilderness protection. A number of recreational opportunities suitable to wilderness areas exist here; backpacking, hiking, photography, rockclimbing, and nature study are aften mentioned. Scenic values are high, with vistas of the Yuha Desert and the ancient lakeshore of Lake Cahuilla. Wilderness designation would also enhance the wilderness qualities of nearby Anza-Borrego Desert State Park. Motorized vehicles cause severe damage to the environment, causing soil disturbance which harms the ecosystem, as well as damaging the solitude of other users.

Numerous comments were received in response to the workbook. Several comments in favor of wilderness favored preserving this area for wilderness. Palm oases and bighorn sheep were mentioned, as were other outstanding wilderness values. It was suggested that the boundaries be expanded to include surrounding areas. Several comments expressed the desire to maintain existing use of the area since it is a good motorized vehicle area. Another comment from San Diego Gas and Electric Company, indicated that the western boundary contains tracts owned by CALTRANS. They recommended a boundary change.

Draft Plan Alternatives

Public comments in agreement with the Protection and Balanced Alternative recommendations for WSA 368 were received in response to the Draft Desert Plan Alternatives.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The In-Ko-Pah Mountains Wilderness Study Area (368) is recommended as suitable for wilderness designation.

The quality of this area, in terms of wilderness, is reflected in its high ranking (5). This, in addition to the fact that it is located relatively close to a major population center, was a prime consideration in the decision. Although there are acknowledged conflicts between wilderness and general recreation, it was decided that the highest and best use of this WSA was as a wilderness area. This designation would also enhance the very high cultural and natural resource values in the area.

IMPACT OF PROPOSED PLAN

Most of the study area is recommended for Class C.

The wilderness values, which rated extremely high would be positively impacted. Wilderness values in the small portion of the WSA at the eastern edge would receive slightly negative impacts from uses allowed under the Class L guidelines.

WILDERNESS STUDY AREA 372

Fish Creek Mountains

GENERAL DESCRIPTION

This area (19,700 acres)[1] is bounded on the north by an industrial mining road; the eastern boundary is the Carrizo Wash. A line from Section 17 southwest to the Anza-Borrego Desert State Park forms a portion of the southeastern boundary. The Anza-Borrego Desert State Park forms the southern and western boundaries to a point common to Sections 2, 3, 10 and 11, T. 14 S., R. 9 E., then north one_half mile, and then west 1-3/4 miles. The western boundary is the western slope of the Fish Creek Mountains.

About 5 percent of the area is non-public land. The non-public lands encroach the area along the northern edge; the southern and western portions are a solid block of federally managed land. A major portion of the northern and eastern portions of the study area has been withdrawn by Secretarial Order of October 19, 1920, for the benefit of the Yuma Reclamation Project. All of Sections 7, 18, and 19, T. 14 S., R. 10 E have been possibly contaminated by unexploded military ordnance, remnants from World War II maneuvers. There are a number of recorded mining claims in the north-central portion of the study area. This WSA is 95 percent mountains and 5 percent alluvial fans. Most soils in this WSA are highly sensitive to surface disturbances.

WILDERNESS QUALITY

Description of Environment

The northern portion includes the rugged, colorful, and massive Fish Creek Mountains, which contain diverse geologic and archaeologic values. Near-vertical walls and maze-like canyons dominate portions of this sparsely vegetated mountain uplift. The ancient beach line of Lake Cahuillla can be observed in the northern portion of this area. The southern portion includes Carrizo Wash and the relatively flat terrain of West Mesa. Topographic features are visibly absent, and vegetation is scattered and sparse.

Natural Condition

The portion of the areas which contains wilderness values is primarily limited to the eastern Fish Creek Mountains, which are affected primarily by natural forces with man's works substantially unnoticeable. Large areas to the west and south have been excluded from wilderness consideration because of degradation of their natural character. These areas include the extensive

[1]Portions of Ts. 13 and 14 S., Rs. 9 and 10 E., SBM.

gypsum mining operation which is currently taking place in the northwestern corner; exploration and mining occurring at the terminus of the Old Tram Road; and numerous permanent facilities and habitations, along with evidence of intensive motorized vehicle activity in the southern portion of the area. The mountains in the far western portion were excluded because of their solid, non-public land status. The adjusted boundary generally conforms to the roadless area boundary to the northeast and southwest while, to the southeast, it follows washes, including Carrizo Wash, at the base of the Fish Creek Mountains. To the west it generally follows the western slopes of the Fish Creek Mountains, avoiding the gypsum mine, continuing south around a small strip of non-public land before reaching the State Park boundary at the extreme southwestern corner of Section 2 (T. 14 S., R. 9 E).

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The area in and around the Fish Creek Mountains contains outstanding opportunities for solitude. Because of the rugged topography and winding, narrow canyons, visitors are effectively shielded from one another. Diverse topography also offers challenge and a variety of primitive recreation opportunities.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 29 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has possible potential for geothermal energy. Data are insufficient to evaluate other mineral and energy resources. The Fish Creek gypsum deposit, now in production, lies adjacent to the western boundary. Two unpatented claims are recorded.

Vegetation

No unusual plant assemblages occur within WSA 372. Vegetation consists mostly of creosote bush scrub, succulent scrub, and desert microphyll

woodland. No sensitive or significant plant species are known to occur within this WSA.

Wildlife

Mule deer concentrations occur in about 20 square miles of this area. All of the area is within the known range of the magic gecko. Prairie falcons have been observed in the area. This WSA is located entirely within the Fish Creek Mountains Primitive Area.

Cultural Resources

Two areas of known cultural resource sensitivity/significance are located within this WSA.

Native American Uses, Needs, and Sites

This WSA has been traditionally occupied by Kamia clans. A Kamia burial area lies immediately off the most extreme eastern border of the WSA at the 6,500-foot elevation level. The Fish Springs Village of the Desert Cahuilla is located in the south-central portion of the WSA. A Kamia/Cahuilla boundary passes through the northern section of the WSA in a northwest to southeast direction.

Scenic Quality

Scenically, the area rated as "medium," but with the highest possible score in the category. Most factors evaluated were scored higher than average, with the "lack of intrusions" being the most notable single element.

General Recreation

One teaching and research area receiving one college or univeristy visit annually is within the WSA.

One good rockhound site exists within the WSA. Fossil shellfish and coral are the collectable materials in this site.

The entire area has been designated as a Primitive Area.

An intensely used concentrated use zone adjacent to the northern boundary received 53,212 recreational visitor use days in 1978. The primary recreational activities in the zone are camping and motorcycle and four wheel drive play and touring.

Range Uses and Potential

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENT

Inventory Phase

Most comments favored inclusion of the area for further wilderness study. Many also urged expansion of the study area southward based on high ecological values (especially in Carrizo Wash) and natural character. Field checks revealed man-made features which detracted from the area's natural character. Some comments dealt with mining and roads, which were excluded after field verification.

Study Phase

A heavy majority of the 80 comments discussing WSA 372 favored further study of the area for wilderness. The most common reason for support was the area's protection and addition to the wilderness qualities of Anza-Borrego Desert State Park. To this end, a majority of those comments supporting wilderness study designation recommended expansion of the wilderness area, the most common suggestion mentioning Carrizo Wash and its high value as a major drainage system and wildlife habitat. Other recommendations include: extension of the southern portion to include the strip between the gunnery range and the park; consideration of the eventual acquisition and management of the gunnery range as wilderness; extension of the wilderness area to the northwest to protect the border of the park (excluding the gypsum operations); extension of the area to the south to make WSAs 372 and 373 a single area; extension of the area south to Coyote Wash; cession of both WSA 372 and WSA 373 to the State for park extension.

Damage caused to the area by vehicles was discussed often. Several urged consideration of the excluded portions, ability to rehabilitate mining and vehicle scars; many believed that rehabilitation was feasible within a reasonable time. Among the values of the area mentioned were: bighorn sheep habitat; scenic floral displays; vistas of Yuha Desert, Mexico, the Coachella and Imperial Valleys; highly scenic and scientifically important geology; archaeological values, including trails and sleeping circles; watersheds; and wildlife, including black rail; Orcutt's aster; and Thurber's pilostyles. Recreational values are high; hiking, photography, nature study and backpacking were mentioned often. Features damaging wilderness qualities were: U.S. Naval gunnery range activities, cited as noisy and dangerous for recreationists; night lights of cities; aircraft flyover; mining scars; noise of mining operations; and railroad visibility and noise

The area's scenic and natural values were mentioned by recreationists who felt vehicle access was necessary and who wished a multiple-use designation to allow family camping in the area to enjoy these values. The area is close to metropolitan areas for easy access. Besides citing mining scars, some believed vehicle access was necessary to continue exploration for mineral resources, including gypsum. The area has potential for oil and gas and geothermal development, which are important nationally, with spinoff benefits to the agricultural economy of Imperial Valley, such as providing a heat

source for food processing. Some parts of the area contain proposed powerline corridors.

Several comments were received in response to the workbook. The majority of the comments favored wilderness designation and expanded boundaries. One comment favored maintaining high motorized vehicle use, with no hikers in the area.

Draft Plan Alternatives

No public comments specific to WSA 372 were received in response to the Draft Desert Plan Alternatives.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Fish Creek Mountains Wilderness Study Area (372) is recommended as suitable for wilderness designation.

This WSA ranked very high in relative wilderness values, and it is located close to a major population center. These factors, which are criteria identified as desert-wide wilderness opportunities, were prime considerations in this decision. Mineral potential and recreation activities were of less significance.

The wilderness designation would also protect the areas of Native American concern and areas of cultural resource sensitivity.

IMPACT TO THE PROPOSED PLAN

Wilderness values would be protected by Class C.

WILDERNESS STUDY AREA 373

Coyote Mountains

GENERAL DESCRIPTION

The northern and western boundaries of this area (8,600 acres)[1] are the Anza-Borrego Desert State Partk. The southern and eastern boundaries are the mining areas of Coyote Mountains and Fossil Canyon. The area is comprised entirely of public land. There is a protective withdrawal covering a portion of Sections 31 and 32, T. 15 S., and Sections 5 and 6, all in R. 9 E. (Public Land Order 5224). There are a number of recorded mining claims in the southeast portion of the study area. This WSA contains 55 percent hills, 40 percent badlands, 3 percent alluvial fans, and 2 percent pediments.

WILDERNESS QUALITY

Description of Environment

This area varies from the deep, steep-walled canyons, massive ridges, highly dissected badland topography, and fragile geologic phenomena of the the Coyote Mountains, to the fairly flat, open bajada dissected by desert washes. Some canyons are highly colorful, with varying pastel hues of earth tones accentuated by the sparseness of vegetation. From a great many locations, outstanding views of badlands and pristine land in Anza-Borrego Desert State Park are visible.

Natural Condition

Most of the Coyote Mountains retains its primeval character and influence, and the area generally appears to have been affected primarily by natural forces. Some primitive ways and inactive mining activities do penetrate the interior. But, after two seasonal hurricane rains, much of that influence has diminished, and the natural condition dominates the landscape today. This area was identified by BLM in 1975 as a Primitive Area. A large portion has been excluded from further wilderness consideration since man's work is substantially noticeable. Along the bajada, near the base of the mountains and near the mouths of some canyons, are found sand and gravel operations, as well as a refuse dump. The southeastern portion has permanent facilities and human habitation in the form of several houses and mobile homes, utility pole lines, and numerous residential roads. The road into Painted Gorge also has been excluded, as has the large area around Carrizo Mountain due to the numerous mining roads and active claims, which have severely altered the natural appearance of the landscape.

[1]Portions of T 15 and 16 S., R. 9 E., SBM.

The Wilderness Study Area boundary follows the roadless area boundary along the north and west. The southern boundary is located at the base of the Coyote Mountains to exclude mining and areas impacted by motorized vehicle use. The eastern boundary parallels Fossil Canyon and skirts around the mining activity

Outstanding Opportunities for Solitude or a Primitive and Unconfined Type of Recreation

The rugged and often vertical nature of the Coyote Mountains, combined with isolated interior badlands, tends to screen visitors from one another; thus, opportunities for solitude are outstanding. Outstanding opportunities for a primitive and unconfined type of recreation are readily available because of the varried terrain, abundance of challenging topography, and importance for geological and ecological study.

WILDERNESS STUDY AREA RANKING

This WSA is ranked 47 out of 137 WSAs.

RESOURCES CONSIDERED

Geology-Energy-Minerals

Resource data for this WSA have not been fully analyzed, integrated, and interpreted. Interpretations set forth here are based on a brief review of available data and are subject to change. Metallic occurrences are based solely on the compilation by Terradata; nonmetallic occurrences are based on the BLM industrial mineral survey. Interpretation of geochemical anomalies is based solely on statistical work by Terradata. Claims include all those that appear on the December 12, 1979, BLM computer printout, representing an estimated 25 percent of all claims that have been recorded with BLM.

This WSA has possible potential for metals and limestone in the southeastern corner, geothermal energy in the southwest, and oil and gas throughout. A portion of a block of 128 unpatented claims extends into the southeastern corner.

Vegetation

No unusual plant assemblages occur within WSA 373. Vegetation consists mostly of creosote bush scrub, succulent scrub, and desert microphyll woodland. Only one sensitive plant species Eucnide rupestus, is known to occur within the WSA.

Wildlife

All 15.6 square miles of this WSA (or 35% of the local range) is transient range for the Peninsular bighorn sheep, currently given a "rare" status by the State of California. Seven square miles is known range of the magic

gecko. This WSA also overlaps 10 square miles (80%) of the Coyote Mountains Primitive Area.

Cultural Resources

No areas of cultural resources sensitivity are known in this area. However, surrounding site densities are quite high and many sites can be predicted in this vicinity.

Native American Uses, Needs, and Sites

This WSA is located within traditional Kamia clan territories. Various village sites are Native American resources within the WSA.

Scenic Quality

The area is one of the most outstanding scenic areas in the CDCA. The area provides diversity and quality that raises it above most others in the desert. Very high ratings were recorded in landform, color, and uniqueness. The badlands topography enhances and provides additional interest to the values present. Vegetation is diverse and relatively lush in the washes but limited elsewhere.

General Recreation

The Coyote Mountains are particularly well known for their complex and spectacular geologic features and for this reason are ranked "high" for their interpretive values. Fossil Canyon is another area ranked "high" for its interpretive values. The Elsinore Fault zone cuts through the WSA also and is rated as "low" for its interpretive qualities.

Three teaching and research sites, used by pre-college, college, and university classes are located in this WSA. Two of these sites are used up to four times annually, and one is used only once a year.

Deer, quail, and chukar hunting is good within this WSA.

The entire WSA has been designated a Natural Environment Area. Portions were also classified as Primitive Area and as Outstanding Natural Area.

In 1978 there were 3,400 visitor use days of concentrated use in this WSA. Primary recreational activities include camping, motorcycle and four wheel drive play and touring, sightseeing, hiking, and rockhounding.

Range Uses and Potential

There are no range resources in this WSA.

SUMMARY OF PUBLIC COMMENTS

Inventory Phase

The relatively large volume of comments was substantially in support of this area as a Wilderness Study Area. Some felt the area should be expanded to the south and east. Those public comments opposed to Wilderness Study Area designation identified the roads, mining activity, and motorized vehicle use in the general area. These areas have been excluded from the Wilderness Study Area. Other comments addressed study phase considerations.

Study Phase

Of 90 letters on WSA 373, 55 supported designation of the area as wilderness, although many suggested boundary expansions. Two reasons for designation were advanced often: (1) the area has excellent geological resources, "a wonderland of geology"; (2) wilderness designation would protect the resources of adjoining Anza-Borrego Desert State Park, which in turn enhances values found in WSA 373. Other features noted include: Peninsular bighorn sheep habitat; Palen Spring formation; value for paleontological study; wildlife habitats; a major drainage system; hiking, camping, and related recreational activities; and general scientific and educational values. Several recommendations for expansion to include the eastern Coyote Mountains, Carrizo Wash system, Fossil Canyon, Painted Gorge, and other areas were mentioned most frquently. Motorized vehicle damage was discussed in some comments.

Objections to wilderness designation centered on the desire to maintain vehicle access for recreation. Four-wheel driving, camping, picnicking, and other activities are good here and the area's proximity to metropolitan areas makes it a prime recreation area. Rockhounds seek marble, glass sand, obsidian, and other materials.

Other multiple-use concerns include the following: mineralization exists in this area (copper, gypsum and limestone); geothermal potential, with increasing importance to the nation, should be developed--spinoff benefits for the county agricultural economy will occur if these are used; east-west power transmission corridors may need to be located in this area for economical transmission of power--the Palo Verde plant proposal was noted. Sights and sounds which intrude on wilderness qualities in this area include: Plaster City (smoke), Ocotillo, I-8, motorized vehicles, road and mine impacts, and aircraft.

Numerous comments were received in response to the workbook. Several comments considered this to be a prime wilderness candidate with outstanding wilderness and ecological values. Several other comments recommended maintaining existing use, because it is a good motorized vehicle area and because of the scars from motorized vehicles, mining, and buildings.

Draft Plan Alternatives

A variety of public comments specific to WSA 373 was received in response to the Draft Desert Plan Alternatives. For example, one indicated complete agreement with the Protection Alternative, another concurred with the Balanced Alternative's recommendations, while a third insisted that the entire Wilderness Study Area be recommended as suitable for wilderness under the Balanced Alternative. Another requested that existing vehicle access routes be retained within future wilderness areas. One comment stated that the exploration for and development of oil, gas, and geothermal resources under the No Action Alternative were the best uses of the study area.

SUMMARY OF RATIONALE FOR THE PROPOSED PLAN

The Coyote Mountains Wilderness Study Area (373) is recommended as nonsuitable for wilderness designation.

This is a very popular recreation site and supports a broad spectrum of activities. The primary activities include motorcycle and four wheel drive touring and play, sightseeing, rockhounding, and hiking. It is also popular for education. In terms of minerals, it shows potential for metals, limestone, and geothermal energy, oil, and gas.

The area ranked in the upper half of the WSAs and is close to the metropolitan area, a desert-wide wilderness objective.

Considering these, among other resource values, it was decided that recreation was the highest and best use of the area.

The area was recommended for Class L. While permitting most recreation activities and access for mineral exploration, it would protect the natural and Native American resource values and high scenic quality.

IMPACT OF PROPOSED PLAN

The WSA is recommended for Class L. Use of the area in accordance with the Class L guidelines would result in slightly negative impacts to the wilderness resource. However, motorized vehicles would be allowed on designated routes only, and intensive mitigation measures would be required for mineral exploration and development.

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